

AD-A104 359 AIR FORCE SYSTEMS COMMAND WASHINGTON DC
DRAFT ENVIRONMENTAL IMPACT STATEMENT. MX DEPLOYMENT AREA SELECT--ETC(1)
DEC 80
UNCLASSIFIED AFSC-TR-81-59

F/G 5/3

NL

1 of 3
AC
AFSC-TR-81-59



AD A104359

Unclassified

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER AFSC-TR-81-59	2. GOVT ACCESSION NO. AD-A104 359	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) Draft Environmental Impact Statement-MX Deployment Area Selection-Environmental Consequences to the Study Area and Operating Base Vicinities-Vol IV Part II	5. TYPE OF REPORT & PERIOD COVERED Draft-December 80	
7. AUTHOR(s)	6. PERFORMING ORG. REPORT NUMBER	
9. PERFORMING ORGANIZATION NAME AND ADDRESS Henningson, Durham & Richardson Santa Barbara California	10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS	
11. CONTROLLING OFFICE NAME AND ADDRESS Deputy for Environmental and Safety Office of the Secretary of the Air Force Pentagon, Washington DC	12. REPORT DATE December 1980	
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office) Ballistic Missile Office ATTN: AFRCE-MX BOX EIS Norton AFB DC	13. NUMBER OF PAGES 358	
16. DISTRIBUTION STATEMENT (of this Report) Unclassified Unlimited	15. SECURITY CLASS. (of this report) Unclassified	
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)	15a. DECLASSIFICATION/DOWNGRADING SCHEDULE <i>V</i>	
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Environmental Impact Statements MX MX Deployment Area Selection		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) The economic, social, and local government impacts of M-X deployment have been estimated quantitatively using a series of inter-related models and computational algorithms. The direct economic effects on the regions are estimated from a given set of M-X project characteristics such as direct employment and material requirements. The indirect economic effects of M-X then are estimated using county-level interindustry-type models and the best available baseline projections for the localities studied. Estimates (con't)		

DD FORM 1 JAN 73 1473 EDITION OF 1 NOV 65 IS OBSOLETE

Unclassified

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

Unclassified

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)

Item 20 con't

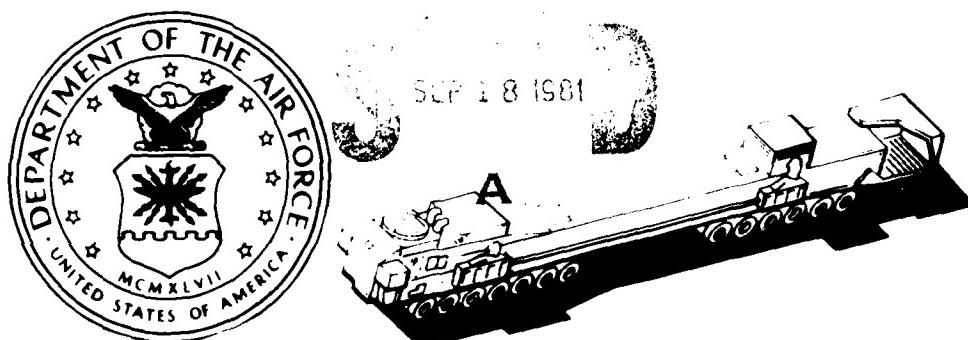
of labor in-migration induced by the project imply an appropriate level of population in-migration. Increases in population and economic activity in the deployment regions then are used to estimate changes in the demand for community services and needs for local infrastructure. Finally, the service and investment estimates are used to calculate impacts on local government units. This analysis is conducted for the Proposed Action and each of the eight alternatives considered in this EIS.

Unclassified

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)

IV
Part II

Environmental Consequences to the Study Regions and Operating Base Vicinities



Environmental Impact Analysis Process



DEPLOYMENT AREA SELECTION
AND LAND WITHDRAWAL/
ACQUISITION DEIS

DEPARTMENT OF THE AIR FORCE

This document contains color
prints. All DTIC reproductions
will be in black and white.



DEPLOYMENT AREA SELECTION
AND
LAND WITHDRAWAL/Acquisition DEIS

CHAPTER 1: PROGRAM OVERVIEW

CHAPTER 1 PRESENTS AN OVERVIEW OF THE M-X SYSTEM AND THIS DEIS INCLUDING:

- A DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES, INCLUDING SCHEDULE AND RESOURCE REQUIREMENTS
- AN OVERVIEW OF THE TIERED M-X ENVIRONMENTAL PROGRAM THAT INVOLVES SITE SELECTION AND LAND WITHDRAWAL
- A PRESENTATION OF PUBLIC SAFETY CONSIDERATIONS WITH PHYSICAL SECURITY AND SYSTEM HAZARDS
- A SUMMARY OF FEDERAL AND STATE AUTHORIZING ACTIONS ASSOCIATED WITH CONSTRUCTION AND OPERATIONS

CHAPTER 2: COMPARATIVE ANALYSIS OF ALTERNATIVES

CHAPTER 2 COMPARES THE ENVIRONMENTAL IMPACTS OF ALTERNATIVE M-X SYSTEM AND OPERATING BASE COMBINATIONS. DETAILS INCLUDE:

- THE SELECTION OF LOCATIONS FOR TWO SURVIVABLE DEPLOYMENT REGIONS, 200 CLUSTERS, AND SEVEN ALTERNATIVE OPERATING BASES
- PRESENTATION OF CONCEPTUAL CONSTRUCTION SCHEDULES, PERSONNEL REQUIREMENTS, AND RESOURCE NEEDS FOR EACH ALTERNATIVE
- COMPARATIVE ENVIRONMENTAL ANALYSES BY ALTERNATIVE FOR EACH RESOURCE PRESENTED IN CHAPTERS 3 AND 4

CHAPTER 3: Affected ENVIRONMENT

CHAPTER 3 DESCRIBES THE POTENTIALLY Affected ENVIRONMENT IN NEVADA, UTAH, TEXAS, AND NEW MEXICO. ENVIRONMENTAL FEATURES OF BOTH BI-STATE REGIONS AND OF OPERATING BASE VICINITIES ARE PRESENTED. RESOURCES ADDRESSED INCLUDE:

- WATER, AIR, MINING, VEGETATION, AND SOILS
- WILDLIFE, AQUATIC SPECIES, AND PROTECTED PLANT AND ANIMAL SPECIES
- EMPLOYMENT, POPULATION, PUBLIC FINANCE, TRANSPORTATION, CONSTRUCTION RESOURCES, ENERGY, LAND USE, AND RECREATION
- CULTURAL RESOURCES, NATIVE AMERICAN CONCERNs, ARCHAEOLOGICAL AND HISTORIC FEATURES

CHAPTER 4: ENVIRONMENTAL CONSEQUENCES TO THE STUDY REGIONS AND OPERATING BASE VICINITIES

CHAPTER 4 EXPANDS THE CHAPTER 2 ANALYSIS FOR EACH RESOURCE IN CHAPTER 3. ADDRESSING THE QUESTIONS RAISED IN SCOPING, CHAPTER 4 DISCUSSES THE FOLLOWING TOPICS ON A RESOURCE BY RESOURCE BASIS.

- THE REASON EACH RESOURCE IS IMPORTANT AND THE SOURCE OF SIGNIFICANT DIRECT AND INDIRECT IMPACTS
- THE INTERRELATIONSHIPS BETWEEN RESOURCES AND KEY CAUSES OF SHORT- AND LONG-TERM IMPACTS SUCH AS AREA DISTURBED AND POPULATION GROWTH
- MITIGATIVE MEASURES WHICH POTENTIALLY REDUCE IMPACTS
- A MATRIX OF POTENTIAL IMPACT SEVERITY BY GEOGRAPHIC AREA FOR THE PROPOSED ACTION AND EACH ALTERNATIVE

CHAPTER 5: APPENDICES

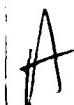
CHAPTER 5 CONTAINS AN M-X BASING ANALYSIS REPORT WITH APPLICATION OF SELECTION CRITERIA TO CANDIDATE BASING AREAS. ADDITIONAL SECTIONS INCLUDE:

GLOSSARY
ACRONYMS
LIST OF REFERENCES
SUBMISSION LINE

MAP/PHOTOGRAPHIC NOTE
REFERENCES
INDEX

CONTENTS

4.1	Introduction	4-1
4.2	Description of Proposed Action and Alternatives	4-11
4.3	Comparative Analysis of Environmental Consequences	4-21
4.3.1	Natural Environment	4-23
4.3.1.1	Groundwater	4-23
4.3.1.2	Surface Water	4-61
4.3.1.3	Air Resources	4-69
4.3.1.4	Mining and Geology	4-83
4.3.1.5	Native Vegetation	4-93
4.3.1.6	Pronghorn Antelope	4-113
4.3.1.7	Sage Grouse	4-145
4.3.1.8	Bighorn Sheep	4-161
4.3.1.9	Protected Species	4-175
4.3.1.10	Wilderness	4-235
4.3.2	Human Environment	4-255
4.3.2.1	Employment and Labor Force	4-257
4.3.2.2	Earnings	4-287
4.3.2.3	Population	4-301
4.3.2.4	Housing	4-323
4.3.2.5	Public Finance	4-339
4.3.2.6	Community Infrastructure	4-359
4.3.2.7	Urban Land Use	4-521
4.3.2.8	Quality of Life	4-533
4.3.2.9	Transportation	4-539
4.3.2.10	Energy	4-561
4.3.2.11	Land Ownership	4-579
4.3.2.12	Rural Land Use	4-605
4.3.2.13	Native Americans	4-677
4.3.2.14	Archaeological and Historical Resources	4-717
4.3.2.15	Paleontological Resources	4-757
4.3.2.16	Construction Resources	4-763
4.4	Other Impacts	4-771
4.4.1	Water Quality	4-771
4.4.2	Other Wildlife	4-776
4.4.3	Aquatic Species	4-809
4.4.4	Significant Natural Areas	4-815



LIST OF FIGURES

Figure		Page
4.1-1	Summary comparison of short-term impact significance between the Proposed Action and Alternatives.	4-5
4.1-2	Summary comparison on long-term impact significance between the Proposed Action and alternative.	4-7
4.3.1.1-1	Groundwater studies program status and scope.	4-24
4.3.1.1-2	Major wetlands and Proposed Action for conceptual project layout.	4-27
4.3.1.1-3	Valley-by-valley comparison of present water usage rate and projected construction peak-year usage rate with perennial yield.	4-29
4.3.1.1-4	Valley-by-valley comparison of present groundwater in storage; 3-year usage at present rate and water demand for M-X DDA construction.	4-30
4.3.1.1-5	Interbasin groundwater system.	4-41
4.3.1.1-6	Coyote Spring, Nevada potential OB zone with watercourses (blue), irrigated agriculture and wetlands outlined (green).	4-42
4.3.1.1-7	Annual water use as percent perennial yield for OB sites.	4-43
4.3.1.1-8	30 year use and available groundwater storage.	4-44
4.3.1.1-9	Milford, Utah, potential OB zone with watercourses (blue), irrigated agriculture and wetlands outlined (green).	4-46
4.3.1.1-10	Beryl, Utah, potential OB zone with watercourse (blue) and irrigated agriculture, windmills, and mines (green).	4-47
4.3.1.1-11	Delta, Utah, potential OB zone with watercourses (blue) and irrigated agriculture, wetlands, and windmills (green)	4-48
4.3.1.1-12	Ely, Nevada, potential OB zones (north) with watercourses (blue) and irrigated agriculture, wetlands, and mines (green).	4-49
4.3.1.1-13	Ely, Nevada, potential OB zone (south) with watercourses (blue) and irrigated agriculture, wetlands, mines, and windmills (green)	4-50

Figure		Page
4.3.1.1-14	Groundwater regions and subregions.	4-51
4.3.1.1-15	Available groundwater storage, 3-year aquifer depletion and M-X use.	4-52
4.3.1.1-16	Available groundwater storage, 30 year aquifer depletion, and M-X use.	4-54
4.3.1.1-17	Clovis, New Mexico, potential OB zone with water-courses (blue), windmills (green), and irrigated agriculture (bright red field patterns).	4-55
4.3.1.1-18	Dalhart, Texas, potential OB zones with water-courses (blue) and irrigated agriculture, wetlands, and windmills (green).	4-56
4.3.1.1-19	Available groundwater storage, 3-year current and M-X use for DDA (split basing Nevada/Utah).	4-58
4.3.1.1-20	Available groundwater storage, 3-year aquifer depletion, M-X use (split basing, Texas/New Mexico).	4-59
4.3.1.5-1	Simplified vegetation type map and the Proposed Action conceptual layout.	4-95
4.3.1.5-2	Vegetation cover types in the vicinity of Coyote Spring Valley OB site.	4-101
4.3.1.5-3	Vegetation cover types in the vicinity of Milford, Utah OB site.	4-103
4.3.1.5-4	Vegetation cover types in the vicinity of Beryl, Utah, OB site.	4-104
4.3.1.5-5	Vegetation cover types in the vicinity of Delta, Utah, OB site.	4-106
4.3.1.5-6	Vegetation cover types in the vicinity of Ely, Nevada, OB site.	4-107
4.3.1.5-7	Simplified vegetation type map, Nevada/Utah, and Alternative 7.	4-111
4.3.1.6-1	Pronghorn range and Proposed Action for conceptual project layout.	4-115
4.3.1.6-2	Pronghorn distribution and Milford operating base and vicinity.	4-121
4.3.1.6-3	Pronghorn distribution kand Beryl operating base and vicinity.	4-125

Figure		Page
4.3.1.6-4	Pronghorn distribution and Delta operating base and vicinity.	4-127
4.3.1.6-5	Pronghorn distribution and Ely operating base and vicinity.	4-129
4.3.1.6-6	Distribution of pronghorn antelope and the conceptual project layout for Alternative 7.	4-133
4.3.1.6-7	Pronghorn antelope in the vicinity of the Dalhart, Texas OB.	4-137
4.3.1.6-8	Pronghorn range for Alternative 8, Nevada/Utah.	4-139
4.3.1.6-9	Distribution of pronghorn antelope and the conceptual project layout for Alternative 8, split basing Texas/New Mexico.	4-141
4.3.1.7-1	Sage grouse habitat and Proposed Action conceptual project layout.	4-147
4.3.1.7-2	Distribution of sage grouse in the Milford OB vicinity.	4-152
4.3.1.7-3	Sage grouse distribution in the Beryl OB vicinity.	4-155
4.3.1.7-4	Distribution of sage grouse in the vicinity of Ely, Nevada OB.	4-156
4.3.1.8-1	Bighorn sheep range and habitat and Proposed Action conceptual project layout.	4-163
4.3.1.8-2	Relationship between bighorn sheep range and the Coyote Spring Valley operating base location.	4-167
4.3.1.8-3	Bighorn sheep range and habitat and Alternative 8	4-175
4.3.1.9-1	Desert Tortoise Distribution and Proposed Action Conceptual project layout.	4-177
4.3.1.9-2	Intersection of desert tortoise distribution at Coyote Spring OB and vicinity.	4-179
4.3.1.9-3	Utah Prairie Dog distribution and Proposed Action conceptual project layout.	4-185
4.3.1.9-4	Distribution of Utah prairie dog in the vicinity of the Milford OB.	4-187
4.3.1.9-5	Distribution of Utah prairie dog in the vicinity of the Beryl OB.	4-191

Figure		Page
4.3.1.9-6	Rare plants and Proposed Action conceptual project layout.	4-199
4.3.1.9-7	Rare plants in the vicinity of the Coyote Spring Valley OB.	4-209
4.3.1.9-8	Rare plants in the Beryl OB vicinity.	4-211
4.3.1.9-9	Rare plants in the Delta OB vicinity.	4-212
4.3.1.9-10	Rare plants in the Ely OB vicinity.	4-213
4.3.1.9-11	Federal and state protected aquatic species and the Proposed Action conceptual project layout.	4-217
4.3.1.9-12	Protected aquatic species in the Coyote Spring Valley vicinity.	4-225
4.3.1.9-13	Protected aquatic species in the Ely OB vicinity.	4-230
4.3.1.10-1	Areas under review for wilderness designation and the Proposed Action conceptual layout.	4-237
4.3.1.10-2	Wilderness in the vicinity of the Coyote Spring Valley OB.	4-241
4.3.1.10-3	Areas of review for wilderness designation and Alternative 8 Nevada/Utah conceptual layout.	4-249
4.3.1.10-4	Relationship between wilderness areas and Alternative 8 project activities, Texas/New Mexico.	4-251
4.3.2.1-1	Nevada/Utah region of influence (ROI)	4-259
4.3.2.1-2	Total regional employment increase due to M-X deployment.	4-261
4.3.2.1-3	Texas/New Mexico region of influence (ROI)	4-279
4.3.2.3-1	Population growth	4-304
4.3.2.9-1	Existing and projected traffic volumes for Alternatives 1-6 during peak construction.	4-540
4.3.2.9-2	Projected traffic volumes in the vicinity of the Coyote Spring operating base for the Proposed Action and Alternatives 1, 2, and 8.	4-545
4.3.2.9-3	Projected traffic volumes in the vicinity of the Milford operating base for the Proposed Action.	4-546
4.3.2.9-4	Projected traffic volumes in the vicinity of the Beryl operating base for Alternative 1.	4-548

Figure		Page
4.3.2.9-5	Projected traffic volumes in the vicinity of the Delta operating base for Alternative 2.	4-549
4.3.2.9-6	Projected traffic volumes in the vicinity of the Beryl operating base for Alternative 3.	4-550
4.3.2.9-7	Projected traffic volumes in the vicinity of the Ely operating base for Alternatives 3 and 5.	4-552
4.3.2.9-8	Projected traffic volumes in the vicinity of the Coyote Spring operating base for Alternatives 4 and 6.	4-553
4.3.2.9-9	Projected traffic volumes in the vicinity of the Milford operating base for Alternatives 5 and 6.	4-554
4.3.2.9-10	Existing highways and recent traffic levels, Texas/New Mexico.	4-555
4.3.2.9-11	Projected traffic volumes in the vicinity of the Clovis operating base for Alternatives 7 and 8 once the base is fully operational.	4-558
4.3.2.9-12	Projected traffic volumes in the vicinity of the Dalhart operating base for Alternative 7 once the base is fully operational.	4-559
4.3.2.10-1	Existing and proposed power transmission lines and the Proposed Action conceptual project layout.	4-563
4.3.2.10-2	Nevada/Utah transmission system configuration.	4-565
4.3.2.10-3	Existing and proposed pipelines and Proposed Action conceptual project layout.	4-567
4.3.2.10-4	Existing and proposed transmission lines in Texas/New Mexico and Alternative 7.	4-574
4.3.2.10-5	Existing and proposed underground pipelines in the Texas/New Mexico region.	4-575
4.3.2.11-1	Private land and the Proposed Action conceptual layout.	4-581
4.3.2.11-2	Land ownership in the vicinity of the Coyote Spring operating base.	4-584
4.3.2.11-3	Land ownership in the vicinity of the operating base near Milford, Utah.	4-585
4.3.2.11-4	Land ownership in the vicinity of the operating base at Beryl, Utah.	4-587

Figure		Page
4.3.2.11-5	Land ownership in the vicinity of the operating base near Delta, Utah.	4-588
4.3.2.11-6	Land ownership in the vicinity of the operating base near Ely, Nevada.	4-589
4.3.2.11-7	Private land and Alternative 7.	4-591
4.3.2.11-8	Land ownership in the vicinity of the operating base near Clovis, Texas.	4-595
4.3.2.11-9	Land ownership in the vicinity of the operating base near Dalhart, Texas.	4-596
4.3.2.11-10	Private land and split basing, Nevada/Utah.	4-597
4.3.2.11-11	Private land and split basing, Texas/New Mexico.	4-599
4.3.2.12-1	Irrigated cropland and the Proposed Action conceptual project layout.	4-607
4.3.2.12-2	Irrigated cropland in the vicinity of the Milford, Utah OB.	4-610
4.3.2.12-3	Irrigated cropland in the vicinity of the Beryl, Utah OB.	4-612
4.3.2.12-4	Irrigated cropland in the Delta OB vicinity.	4-613
4.3.2.12-5	Irrigated cropland in the vicinity of the Ely, Nevada OB.	4-614
4.3.2.12-6	Irrigated cropland in the conceptual project layout for Alternative 7.	4-616
4.3.2.12-7	Irrigated cropland, Nevada/Utah, Alternative 8.	4-619
4.3.2.12-8	Irrigated cropland and the conceptual project layout for split basing, Texas/New Mexico.	4-621
4.3.2.12-9	Effect of quantity distance zones on ranches and homes.	4-628
4.3.2.12-10	AUM concentrations and Proposed Action conceptual layout.	4-637
4.3.2.12-11	Rangeland and the conceptual project layout for Alternative 7.	4-647
4.3.2.12-12	AUM concentrations and split basing in Nevada/Utah.	4-651
4.3.2.12-13	Rangeland and the conceptual project layout for split basing, Texas/New Mexico.	4-655

Figure		Page
4.3.2.12-14	Existing recreational sites and the Proposed Action conceptual layout.	4-658
4.3.2.12-15	Recreational areas in the vicinity of the Coyote Spring Valley, Nevada OB.	4-661
4.3.2.12-16	Recreational areas in the vicinity of the Milford, Utah OB.	4-663
4.3.2.12-17	Recreational areas in the Beryl, Utah, vicinity.	4-665
4.3.2.12-18	Recreational areas in the Delta, Utah, vicinity.	4-666
4.3.2.12-19	Recreational areas in the Ely, OB vicinity.	4-669
4.3.2.12-20	Major recreational areas in the Texas/New Mexico area and Alternative 7.	4-671
4.3.2.12-21	Recreational areas in the vicinity of the Clovis, Texas OB.	4-673
4.3.2.12-22	Recreational areas in the vicinity of the Dalhart, New Mexico, OB.	4-674
4.3.2.13-1	Native American cultural resources and proposed action and conceptual layout.	4-681
4.3.2.13-2	Native American cultural resources in the vicinity of Coyote Spring Valley, OB.	4-684
4.3.2.13-3	Native American cultural resources in the vicinity of the Milford, Utah, OB.	4-686
4.3.2.13-4	Native American cultural resources in the vicinity of the Beryl, Utah, OB.	4-689
4.3.2.13-5	Native American cultural resources in the vicinity of the Delta, Utah, OB.	4-691
4.3.2.13-6	Native American cultural resources in the vicinity of the Ely, Nevada, OB.	4-694
4.3.2.13-7	Native American cultural resources and conceptual layout for split basing in Nevada/Utah.	4-699
4.3.2.13-8	Native American water accessibility and agricultural land use and Proposed Action conceptual layout.	4-703
4.3.2.13-9	Native American reservation and colonies and the Proposed Action conceptual layout.	4-713

Figure		Page
4.3.2.14-1	Protected archaeological and historical sensitivity zones and proposed zones and Proposed Action conceptual project layout.	4-719
4.3.2.14-2	Areas of potential archaeological and historical sensitivity in the vicinity of the Coyote Spring Valley OB.	4-732
4.3.2.14-3	Areas of potential archaeological and historical sensitivity in the vicinity of the Milford, Utah OB.	4-733
4.3.2.14-4	Areas of potential archaeological and historical sensitivity in the vicinity of the Beryl, Utah OB.	4-736
4.3.2.14-5	Areas of potential archaeological and historical sensitivity in the vicinity of the Delta, Utah OB.	4-738
4.3.2.14-6	Areas of potential archaeological and historical sensitivity in the vicinity of the Ely, Nevada OB.	4-740
4.3.2.14-7	Relationship between areas of high archaeological and historical sensitivity--Alternative 7.	4-745
4.3.2.14-8	Areas of potential archaeological and historical sensitivity in the vicinity of Clovis, New Mexico.	4-748
4.3.2.14-9	Areas of potential archaeological and historical sensitivity in the vicinity of Dalhart, Texas.	4-749
4.3.2.14-10	Predicted archaeological and historical sensitivity zones and the conceptual project	4-751
4.3.2.14-11	Relationship between areas of high archaeological and historical sensitivity--Alternative 8, Texas/New Mexico.	4-753
4.3.2.15-1	Pleistocene land beds and cenozoic fossil locales and the Proposed Action conceptual project layout.	4-759
4.3.2.16-1	Direct and indirect M-X cement requirements.	4-765
4.3.2.16-2	Cement price impacts, Nevada/Utah region.	4-766
4.3.2.16-3	Cement price impacts, Texas/New Mexico region	4-768
4.4.2-1	Mule deer distribution and the Proposed Action conceptual project layout.	4-781
4.4.2-2	Elk distribution and the Proposed Action conceptual project layout.	4-783
4.4.2-3	Distribution of waterfowl and the Proposed Action conceptual project layout.	4-787

Figure		Page
4.4.2-4	Distribution of the larger playa lakes in the Texas high plains.	4-793
4.4.2-5	Distribution of elk in the vicinity of Beryl, Utah, OB.	4-796
4.4.2-6	Distribution of elk in the vicinity of Ely, Nevada OB.	4-798
4.4.2-7	Distribution of elk in the vicinity of Milford, Utah, OB.	4-799
4.4.2-8	Distribution of threatened and endangererd wildlife and the Proposed Action conceptual project layout.	4-803
4.4.2-9	Distribution of wild horses and burros and the proposed action conceptual project layout.	4-805
4.4.4-1	Significant natural areas and the Proposed Action conceptual project layout.	4-817
4.4.4-2	Significance of natural areas in the vicinity of Beryl, Utah OB.	4-821

LIST OF TABLES

Table		Page
4.1-1	Resource categories and resources discussed in Section 4.3.1	4-2
4.2-1	OB complex locations and compositions for Proposed Action and alternatives.	4-12
4.2-2	Distribution of protective shelters by state and county for the Proposed Action (PA) and alternatives.	4-13
4.2-3	M-X system facilities land requirements (acres)	4-14
4.2-4	Total construction resources for Proposed Action, Nevada/Utah full basing.	4-15
4.2-5	Total construction resources for Alternative 7, Texas/New Mexico full basing.	4-17
4.2-6	Total construction resources for portion of Alternative 8, Nevada/Utah split basing.	4-18
4.2-7	Total construction resources for portion of Alternative 8, Texas/New Mexico split basing.	4-19
4.3.1.1-1	Potential impact to groundwater availability in Nevada/Utah DDA for the Proposed Action and Alternatives 1-6.	4-32
4.3.1.1-2	Potential impact to groundwater availability in the operating base areas for the Proposed Action and Alternatives 1-8.	4-45
4.3.1.1-3	Potential impacts to groundwater availability in Texas/New Mexico DDA for Alternative 7.	4-53
4.3.1.1-4	Potential impact to groundwater availability in Nevada/Utah and Texas/New Mexico DDAs for Alternative 8.	4-60
4.3.1.2-1	Potential water erosion impacts in the Nevada/Utah DDA for the Proposed Action and Alternatives 1-6.	4-63
4.3.1.2-2	Potential water erosion impacts which could result from construction of operating bases for the Proposed Action and Alternatives 1-8.	4-64
4.3.1.2-3	Potential water erosion impacts in Texas/New Mexico DDA for Alternative 7.	4-67
4.3.1.2-4	Potential water erosion impacts in Nevada/Utah and Texas/New Mexico DDA for Alternative 8 (split basing).	4-68

Table		Page
4.3.1.3-1	Summary of air quality resource characteristics for each hydrologic subunit for the deployment areas of the Proposed Action and Alternatives 1-6.	4-70
4.3.1.3-2	Potential direct impact to air quality in Nevada/Utah DDA for the Proposed Action and for Alternatives 1-6.	4-74
4.3.1.3-3	Potential impact to air quality at operating bases.	4-76
4.3.1.3-4	Direct impact to air quality in the Texas/New Mexico DDA for Alternative 7.	4-79
4.3.1.3-5	Summary of air quality characteristics by county for Alternatives 7 and 8.	4-80
4.3.1.3-6	Direct impact to air quality in the Nevada/Utah and Texas/New Mexico DDAs for Alternative 8.	4-82
4.3.1.4-1	Areas of high mining and geological resource value in Nevada and Utah valleys potentially affected by M-X.	4-85
4.3.1.4-2	Potential impact to known mining and mineral recovery activity in Nevada/Utah DDA for the Proposed Action and Alternatives 1-6.	4-87
4.3.1.4-3	Potential overall impact to known mining and mineral recovery activity which could result from construction of operating bases (OBs) for the Proposed Action and Alternatives 1-8.	4-88
4.3.1.4-4	Potential overall impact to known mining and mineral recovery activity in Texas/New Mexico DDA for Alternative 7.	4-91
4.3.1.4-5	Potential overall impact to known mining and mineral recovery activity in Nevada/Utah and Texas/New Mexico DDAs for Alternative 8.	4-92
4.3.1.5-1	Potential impact to native vegetation in Nevada/Utah DDA for the Proposed Action and Alternatives 1-6, and 8.	4-98
4.3.1.5-2	Potential impact to native vegetation in Texas/New Mexico and Alternatives 7 and 8.	4-110
4.3.1.6-1	Potential direct impact to pronghorn in Nevada/Utah DDA for the Proposed Action and Alternatives 1-6.	4-119
4.3.1.6-2	Potential overall impact to pronghorn resulting from construction and operation of M-X operating bases for the Proposed Action and Alternatives 1-8.	4-123

Table		Page
4.3.1.6-3	Potential impact to pronghorn resulting from construction and operation of M-X DDA for Alternative 7.	4-135
4.3.1.6-4	Potential impact to pronghorn in Nevada/Utah and Texas/New Mexico DDAs for Alternative 8.	4-143
4.3.1.7-1	Potential impact to sage grouse in Nevada/Utah DDA for the Proposed Action and Alternatives 1-6.	4-149
4.3.1.7-2	Potential overall impact to sage grouse which could result from construction and operating bases for the Proposed Action and Alternatives 1-4.	4-154
4.3.1.7-3	Potential overall impact to sage grouse which could result from construction to operating bases for Alternatives 5-8.	4-158
4.3.1.8-1	Potential impact to bighorn sheep in Nevada/Utah DDA for the Proposed Action and Alternatives 1-6.	4-165
4.3.1.8-2	Potential impact to bighorn sheep resulting from construction and operation of M-X operating bases for the Proposed Action and Alternatives 1-4.	4-168
4.3.1.8-3	Potential impact to bighorn sheep resulting from construction and operation of M-X operating bases for Alternatives 5-8.	4-170
4.3.1.8-4	Potential impact to bighorn sheep in Nevada/Utah DDA for Alternative 8.	4-173
4.3.1.9-1	Potential impact to desert tortoises in Nevada and Utah within 70 mi of the proposed operating base at Coyote Spring.	4-180
4.3.1.9-2	Potential impact to the Utah prairie dog around operating bases (OBs) for the Proposed Action and Alternatives 1-8.	4-188
4.3.1.9-3	Potential impact to rare plants in Nevada/Utah and Texas/New Mexico which could occur as a result of DDA and OB construction for the Proposed Action and Alternatives 1-8.	4-197
4.3.1.9-4	Protected or recommended protected aquatic biota for which available data indicate close monitoring for water withdrawal-related impacts during construction or operation of the project in Nevada/Utah.	4-220
4.3.1.9-5	Valleys containing both sensitive aquatic habitat and proposed structures (inhabited by either legally or recommended protected aquatic species).	4-222

Table		Page
4.3.1.9-6	Potential direct impact to protected aquatic species in Nevada/Utah DDA for the Proposed Action and Alternatives 1-6.	4-223
4.3.1.9-7	Potential impact to protected aquatic species which could result from construction and operation of M-X operating bases for the Proposed Action and Alternatives 1-8.	4-226
4.3.1.9-8	Potential direct impact to protected aquatic species in Nevada/Utah and Texas/New Mexico DDA for Alternative 8.	4-234
4.3.1.10-1	Potential impact to wilderness in Nevada/Utah DDA for the Proposed Action and Alternatives 1-6.	4-239
4.3.1.10-2	Potential population-related impacts to wilderness around operating bases for the Proposed Action and Alternatives 1-8.	4-243
4.3.1.10-3	Potential impact to wilderness in Texas/New Mexico around operating bases for Alternative 7.	4-247
4.3.1.10-4	Potential impact to wilderness in Nevada/Utah and Texas/New Mexico DDAs for Alternative 8.	4-253
4.3.2.1-1	Nevada/Utah total employment change (by place of residence).	4-267
4.3.2.1-2	Texas/New Mexico total employment change (by place of residence).	4-281
4.3.2.2-1	Nevada/Utah total earnings change.	4-289
4.3.2.2-2	Texas/New Mexico total earnings change.	4-296
4.3.2.3-1	Nevada/Utah total population change.	4-310
4.3.2.3-2	Texas/New Mexico total population change.	4-318
4.3.2.4-1	Nevada/Utah total housing requirements.	4-325
4.3.2.4-2	Texas/New Mexico total housing requirements.	4-335
4.3.2.5-1	Nevada/Utah local government net fiscal effects (in thousands of 1980 dollars).	4-341
4.3.2.5-2	Nevada/Utah capital expenditure requirements (in thousands of 1980 dollars).	4-344
4.3.2.5-3	Texas/New Mexico local government net fiscal effects (in thousands of 1980 dollars).	4-351

Table		Page
4.3.2.5-4	Texas/New Mexico capital expenditure requirements (in thousands of 1980 dollars).	4-355
4.3.2.6-1	Nevada/Utah teacher requirements.	4-361
4.3.2.6-2	Texas/New Mexico teacher requirements.	4-369
4.3.2.6-3	School district revenues, expenditures, and net impacts (thousands FY 1980 dollars) (1) baseline: Low Proposed Action.	4-375
4.3.2.6-4	School district revenues, expenditures, and net impacts (thousands FY 1980 dollars) (1) baseline: High Proposed Action.	4-383
4.3.2.6-5	Local government revenues, expenditures, and net impacts (thousands FY 1980 dollars) (1) baseline: Low Alternative 7.	4-391
4.3.2.6-6	Local government revenues, expenditures, and net impacts (thousands FY 1980 dollars) (1) baseline: Low Alternative 8B.	4-403
4.3.2.6-7	School district revenues, expenditures, and net impacts (thousands FY 1980 dollars) (1) baseline: Low Alternative 7.	4-415
4.3.2.6-8	School district revenues, expenditures, and net impacts (thousands FY 1980 dollars) (1) baseline: Low Alternative 8B.	4-431
4.3.2.6-9	Alternative 7: full deployment - Texas/New Mexico (L), base I at Clovis, NM (Curry Co.), Base II at Dalhart, TX (Hartley Co.).	4-445
4.3.2.6-10	Alternative 8B: split deployment (80/20) - Texas/New Mexico, base I at Clovis, NM (Curry Co.).	4-453
4.3.2.6-11	Projected baseline and M-X induced school enrollments by grade level, by alternative, in Iron assuming trend baseline.	4-461
4.3.2.6-12	Projected baseline and M-X induced teacher requirements by grade level, by alternative, in Iron assuming trend baseline.	4-463
4.3.2.6-13	Projected baseline and M-X induced school enrollments by grade level, by alternative, in Clark assuming trend baseline.	4-467
4.3.2.6-14	Projected baseline and M-X induced teacher requirements by grade level, by alternative, in Clark assuming trend baseline.	4-469

Table		Page
4.3.2.6-15	Projected baseline and M-X induced school enrollments by grade level, by alternative, in Millard assuming trend baseline.	4-473
4.3.2.6-16	Projected baseline and M-X induced teacher requirements by grade level, by alternative, in Millard assuming trend baseline.	4-475
4.3.2.6-17	Projected baseline and M-X induced school enrollments by grade level, by alternative, in Pine assuming trend baseline.	4-477
4.3.2.6-18	Projected baseline and M-X induced teacher requirements by grade level, by alternative, in White Pine assuming trend baseline.	4-479
4.3.2.6-19	Projected baseline and M-X induced school enrollments by grade level, by alternative, in Beaver assuming trend baseline.	4-483
4.3.2.6-20	Projected baseline and M-X induced teacher requirements by grade level, by alternative, in Beaver assuming trend baseline.	4-485
4.3.2.6-21	Projected baseline and M-X induced school enrollments by grade level, by alternative, in Curry assuming trend baseline.	4-487
4.3.2.6-22	Projected baseline and M-X induced school enrollments by grade level, by alternative, in Hartley assuming trend baseline.	4-491
4.3.2.6-23	Projected baseline and M-X induced school enrollments by grade level, by alternative, in Dallam assuming trend baseline.	4-491
4.3.2.6-24	Nevada/Utah health services personnel requirements.	4-495
4.3.2.6-25	Texas/New Mexico health services personnel requirements.	4-502
4.3.2.6-26	Nevada/Utah public safety personnel requirements	4-509
4.3.2.6-27	Texas/New Mexico public safety personnel requirements.	4-516
4.3.2.7-1	Urban land availability in OB counties.	4-522
4.3.2.7-2	M-X induced impacts on urban land requirements.	4-524
4.3.2.8-1	Characterization of population growth in Nevada/Utah deployment region.	4-536
4.3.2.8-2	Characterization of population growth in the Texas/New Mexico deployment region.	4-537

Table		Page
4.3.2.9-1	Potential long-term impacts to accessibility and short-term impacts to traffic volumes due to location of DDA in Nevada/Utah for Proposed Action and Alternatives 1-6.	4-541
4.3.2.9-2	Potential impacts on traffic which could result due to the location of the DDA and operating bases (OBs) for the Proposed Action and Alternatives 1-6.	4-544
4.3.2.9-3	Potential impacts on traffic which could result due to the location of the DDA and operating bases (OBs) in Texas/New Mexico for Alternative 7.	4-556
4.3.2.9-4	Potential impacts on traffic due to split base location of DDA and operating bases in Nevada/Utah and Texas/New Mexico for Alternative 8.	4-560
4.3.2.10-1	Summary of energy requirements by alternative, annual consumption.	4-569
4.3.2.11-1	Potential impact on private land in Nevada/Utah DDA for the Proposed Action and Alternatives 1-6.	4-583
4.3.2.11-2	Potential impact to private land in the Texas/New Mexico DDA for Alternative 7.	4-593
4.3.2.11-3	Potential impact on private land in Nevada/Utah and Texas/New Mexico DDAs for Alternative 8.	4-600
4.3.2.11-4	State lands disturbed at potential operating base facilities and amount existing in suitability zones.	4-603
4.3.2.12-1	Potential impact on irrigated cropland in the Nevada/Utah region for the Proposed Action.	4-609
4.3.2.12-2	Potential impact to irrigated cropland in Texas/New Mexico for Alternative 7.	4-617
4.3.2.12-3	Potential impact on irrigated cropland in Nevada/Utah and Texas/New Mexico regions for Alternative 8.	4-623
4.3.2.12-4	Potential impacts to homes and ranches in Texas/New Mexico DDA for Alternatives 7 and 8.	4-630
4.3.2.12-5	Potential direct impact to grazing as a result of M-X DDA construction in Nevada/Utah for Proposed Action and Alternatives 1-6.	4-639
4.3.2.12-6	Potential direct impact to grazing from area disturbed by construction of operating bases for the Proposed Action and Alternatives 1-6, and 8 (Coyote Spring Valley).	4-641

Table		Page
4.3.2.12-7	Potential direct impact to grazing as a result of M-X DDA construction in Texas/New Mexico for Alternative 7.	4-648
4.3.2.12-8	Potential direct impact to grazing as a result of DDA construction in Nevada/Utah and Texas/New Mexico for Alternative 8 (split basing).	4-653
4.3.2.12-9	Potential impacts to outdoor recreational sites in the vicinity of OB sites.	4-664
4.3.2.12-10	Potential impacts to outdoor recreational sites in the vicinity of the OB sites, Clovis, New Mexico and Dalhart, Texas.	4-675
4.3.2.13-1	Potential impacts to Native American ancestral/sacred sites in Nevada and Utah DDA for the Proposed Action and for Alternatives 1-6.	4-683
4.3.2.13-2	Potential impacts to Native American ancestral/sacred sites in the vicinity of Coyote Spring for the Proposed Action and for Alternatives 1, 2, 4 and 6.	4-685
4.3.2.13-3	Potential impact to Native American ancestral/sacred sites in the vicinity of Milford for the Proposed Action and for Alternatives 5 and 6.	4-687
4.3.2.13-4	Potential impact to Native American ancestral/sacred sites in the vicinity of Milford for the Proposed Action and for Alternatives 1, 3, and 4.	4-690
4.3.2.13-5	Potential impact to Native American ancestral/sacred sites in the vicinity of Delta for Alternative 2.	4-692
4.3.2.13-6	Potential impact to Native American ancestral/sacred sites in the vicinity of Ely for Alternatives 4 and 5.	4-695
4.3.2.13-7	Potential impacts to Native American ancestral/sacred sites in Nevada/Utah split basing DDA Alternative 8.	4-698
4.3.2.13-8	Potential impact to Native American water accessibility and land use in the Nevada/Utah DDA for the Proposed Action and Alternatives 1-6.	4-705
4.3.2.13-9	Potential impact to Native American water accessibility and land use in the Coyote Spring operating base suitability area for the Proposed Action and Alternatives 1, 2, 4, 6 and 8.	4-706
4.3.2.14-1	Potential impacts to archaeological and historical resources in Nevada/Utah DDA for the Proposed Action and for Alternatives 1-6.	4-721

Table		Page
4.3.2.14-2	Potential impact to archaeological and historical resources from operating bases (OBs) for the Proposed Action and Alternatives 1-8.	4-723
4.3.2.14-3	Potential impact to cultural resources in Texas/New Mexico DDA for Alternative 7.	4-747
4.3.2.14-4	Potential impact to archaeological and historical resources in Nevada/Utah and Texas/New Mexico DDAs for Alternative 8.	4-756
4.4.3-1	Abundance and sensitivity of impact for native fish, Nevada/Utah.	4-810
4.4.3-2	Abundance and sensitivity to impact for game fishes in the Texas/New Mexico study area.	4-812
4.4.3-3	Percent angler use and fish harvest by residents of Clark County at distant fishing resources.	4-814
4.4.4-1	Abundance and sensitivity to impact of key natural areas, Texas/New Mexico high plains.	4-820

Human Environment



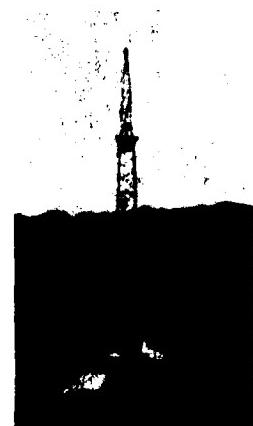
HUMAN ENVIRONMENT

Deployment of the M-X system in sparsely populated areas of the southwestern United States will produce rapid, large-scale changes in the character of the human environment of these deployment regions. Effective operation of the M-X system requires a deployment region containing relatively few human inhabitants. Yet construction and operation of the system will result in the introduction of large numbers of people into the rural, thinly settled deployment region. This rapid growth in population resulting from the large labor and materials demands of the project will cause significant changes in the economic and social structures of the rural deployment areas.

In some cases, M-X deployment would transform deployment-region communities from slow-growing or declining communities of a few thousand population or smaller into active regional population centers of 20,000 persons or more. This would be the case for the communities adjacent to the M-X operating bases. Other areas would undergo a decade of "boom-bust" construction growth similar to that caused by energy developments throughout the western United States.

¹ The economic, social, and local government impacts of M-X deployment have been estimated quantitatively using a series of inter-related models and computational algorithms. The direct economic effects on the regions are estimated from a given set of M-X project characteristics such as direct employment and material requirements. The indirect economic effects of M-X then are estimated using county-level interindustry-type models and the best available baseline projections for the localities studied. Estimates of labor in-migration induced by the project imply an appropriate level of population in-migration. Increases in population and economic activity in the deployment regions then are used to estimate changes in the demand for community services and needs for local infrastructure. Finally, the service and investment estimates are used to calculate impacts on local government units. This analysis is conducted for the Proposed Action and each of the eight alternatives considered in this EIS.

Employment and Labor Force



EMPLOYMENT AND LABOR FORCE

INTRODUCTION (4.3.2.1.1)

Deployment of the M-X missile would provide direct employment for almost 30,000 persons during the peak of project activity. It also would generate demands for construction materials and other goods and services to support the construction and operations work forces. Project demands for labor, goods, and services will stimulate a great deal of economic activity in the deployment region where much of the income of persons employed on the M-X project would be spent and respent. Firms in the region would supply many of the goods and services demanded by the project employees.

The direct economic effects of the M-X project originate at specific geographic locations. Construction camps and operating bases represent points of employment and earnings for construction, assembly and checkout, and operations personnel. The OBs also serve as points of procurement demand for goods and services. The consequences of direct project-related economic activity, however, would be distributed over a broad region. This analysis makes specific assumptions about the regional distribution of project expenditures originating at particular points. These expenditures constitute changes in final demand for county-level models, which then estimate direct and indirect earnings, employment, labor force, and population effects in each study-region county.

PROPOSED ACTION (4.3.2.1.2)

Full deployment of the M-X system in Nevada/Utah would create large demands for labor, goods, and services throughout the deployment region. These resource demands would begin in the deployment region with the commencement of project construction activity in 1982, and would build rapidly to a peak during the years 1986-1988. Project demands would reach a long-run level after 1990, which would be sustained for the operating life of the system.

Direct Employment Effects

The most important direct economic effect is the project's demand for labor. M-X employment would start in 1982, initially concentrated mostly in construction trades. M-X construction employment is projected to peak at more than 17,000

workers in 1986. Direct project employment in all categories--construction, assembly and checkout, and operations--is expected to approach 30,000 jobs from 1986 through 1988. Direct M-X employment would diminish rapidly thereafter, reaching a long-term level of 13,200 in 1991 which would continue for the life of the system.

The project would exert economic impacts over many parts of the southwestern United States as people and materials flow to points of project activity in Nevada/Utah. The most important of these effects, however, would occur within a 12-county bstate region in Nevada/Utah containing the deployment area itself and the Las Vegas and Salt Lake City - Provo metropolitan centers. This area defined as the region of influence (ROI) for this analysis contains the Nevada counties of Clark, Eureka, Lincoln, Nye, and White Pine, and the Utah counties of Beaver, Iron, Juab, Millard, Salt Lake, Utah, and Washington. (Figure 4.3.2.1-1).

Construction camps dispersed throughout the ROI would represent points of employment for personnel engaged in construction and assembly and checkout of the designated deployment area (DDA) facilities. These camps would be employment centers for more than 17,600 persons at the peak of DDA construction and assembly and checkout activity in 1986. A total of 18 camps would be distributed over the region, with activity at each camp for a three-to-four-year period between 1983 and 1990. As many as 3,000 workers could be based in a camp in the peak year of its activity.

Locating the larger of the two OBs at Coyote Spring Valley, Nevada, would directly create jobs for up to 5,000 construction and assembly and checkout workers and 7,500 operations personnel (including military) in Clark and Lincoln counties. Construction of the base would begin in 1982. Operations would begin at this site with 1,250 persons in 1984, with a gradual build-up of operating staff until the full complement of 7,500 workers is reached in 1989. The second OB at Milford, Utah, would employ up to 2,000 construction workers and 5,700 operations personnel (including military) in Beaver and Iron counties. Construction of this OB would start in 1985. The Milford OB would begin operations in 1986, and reach its full complement of personnel by 1989. Military personnel are expected to comprise about 85 percent of the combined base staffing level of 13,200 persons. Activity at the OBs would continue at these levels throughout the operating life of the system.

Indirect Employment Effects

Large numbers of jobs indirectly related to M-X deployment also would be created within the ROI. The most important source of indirect employment is the responding of project payrolls. In addition, procurement from local suppliers would further increase employment in the region's metropolitan areas and in the communities nearest the OBs. Regional purchases of construction materials would constitute an additional--though minor--source of regional economic stimulus. At the peak of project activity (1986-1988), indirect employment at the regional level would be in the range of 22,000-30,000 jobs, depending on the analytical technique used. In the long run, indirect employment would be much less, about 6,000 jobs, because direct M-X employment would decline and the OBs would provide many of their own supporting services.

NEG 3422 at ptr.

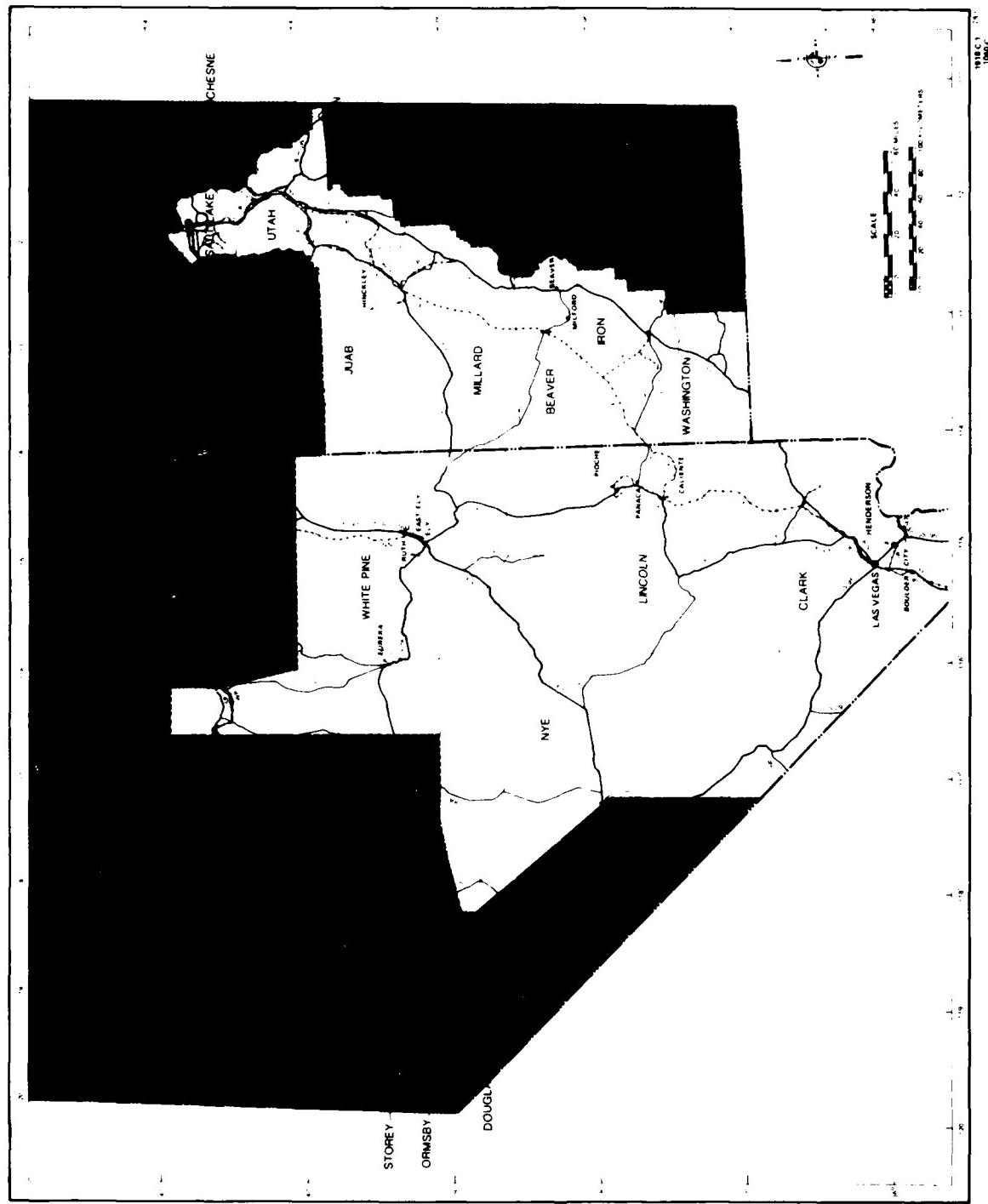


Figure 4.3.2.1-1 Nevada/Utah region of influence (ROI).

Total Employment Effects

Total direct and indirect project-related employment is projected to peak at 52,000-60,000 jobs in 1987 for the Nevada/Utah ROI as a whole. Employment attributable to M-X deployment would represent 7-8 percent of projected regional employment in 1987 under trend-growth assumptions. Several other large projects, including White Pine and Intermountain Power, also may be implemented during the same period, and would add an additional 17,000 jobs to regional employment. The cumulative employment impacts of M-X and these other projects therefore could be as much as 77,000 jobs over employment projected under trend-growth conditions.

Employment in the region without M-X or these other large projects is projected to grow at about 3 percent annually throughout the 1980s (University of Utah, Bureau of Economic and Business Research, September 1980). Compared to historical U.S. employment growth from 1970-1979 of 2.4 percent annually (Council of Economic Advisors, Economic Report of the President, Washington, D.C., January 1980, p. 236) and projected growth for the nation as a whole of 1.9 percent per annum through 1990 (Chase Econometrics standard-trend long-term forecast, October 1980), this projected growth in employment is quite strong. At the same time, growth of 3.0 percent yearly is representative of historical and projected growth for the western United States (Nevada National Bank, Western Economic Overview, 1970-77, and Chase Econometrics regional forecast, April 1980). Employment generated by M-X would produce a sizable intermediate-term "bubble" in this generally strong regional growth pattern, but would not significantly alter the long-term picture at the ROI level.

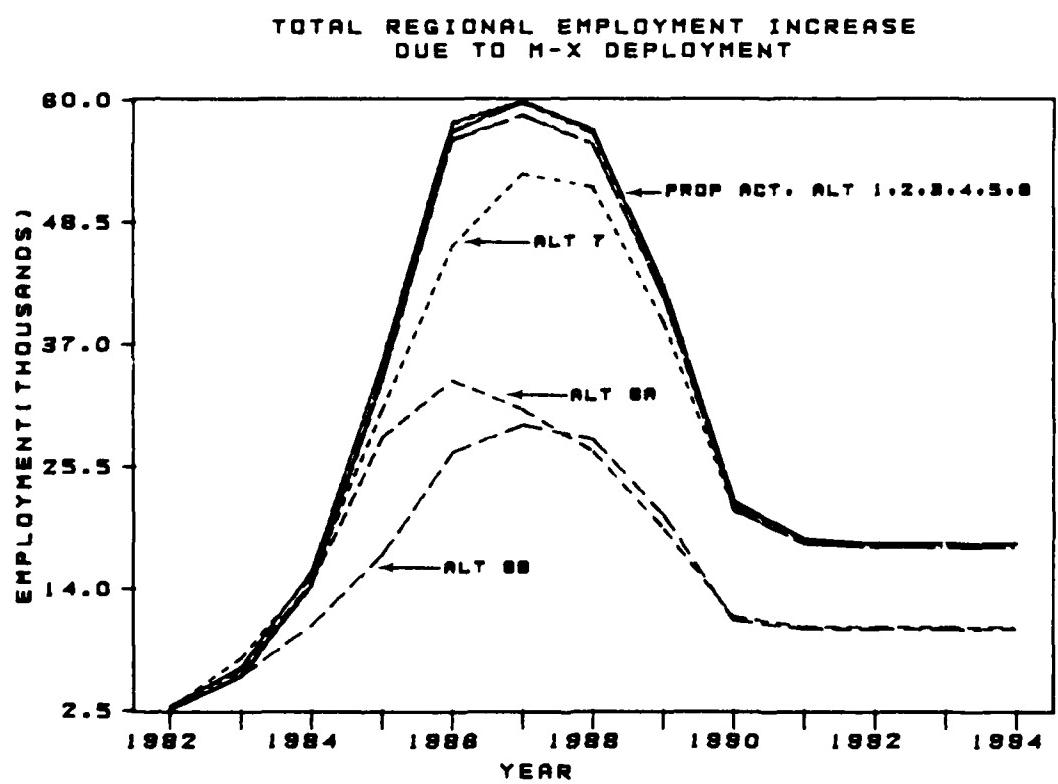
Regional average unemployment rates could decline by as much as 1-2 percentage points during peak years, but they would rise again in the long run. Markets for certain types of skilled labor would be very tight during the peak of construction activity. In particular, excess regional demands for ironworkers and operating engineers could be acute, leading to temporary but significant escalation of wages for these construction crafts. These labor shortages also would extend to other occupational groups as more mobile workers seek relatively high-paying employment on the M-X project.

The long-term employment impacts of M-X deployment would be about 18,000-19,000 jobs, approximately 2 percent of projected baseline employment beyond 1990. The other large projects which may be built within the ROI would add another 10,000 jobs to regional employment in the long run. M-X and these other projects thus would cumulatively raise regional employment by about 3 percent above its projected trend-growth level during 1990-1995. A detailed graphical analysis of employment growth for the region and its counties is presented in Figure 4.3.2.1-2. Table 4.3.2.1-1 presents detailed impact data by county.

M-X-related employment effects would be much larger at the county level than at the regional level. Employment generated by the project would create boom-growth episodes in most of the rural counties within the ROI. In many cases, moreover, this growth would be temporary, and would be followed by a period of rapid employment decline as the project moves from construction and assembly and checkout phases into the operations phase.

Operating Base Effects on Employment

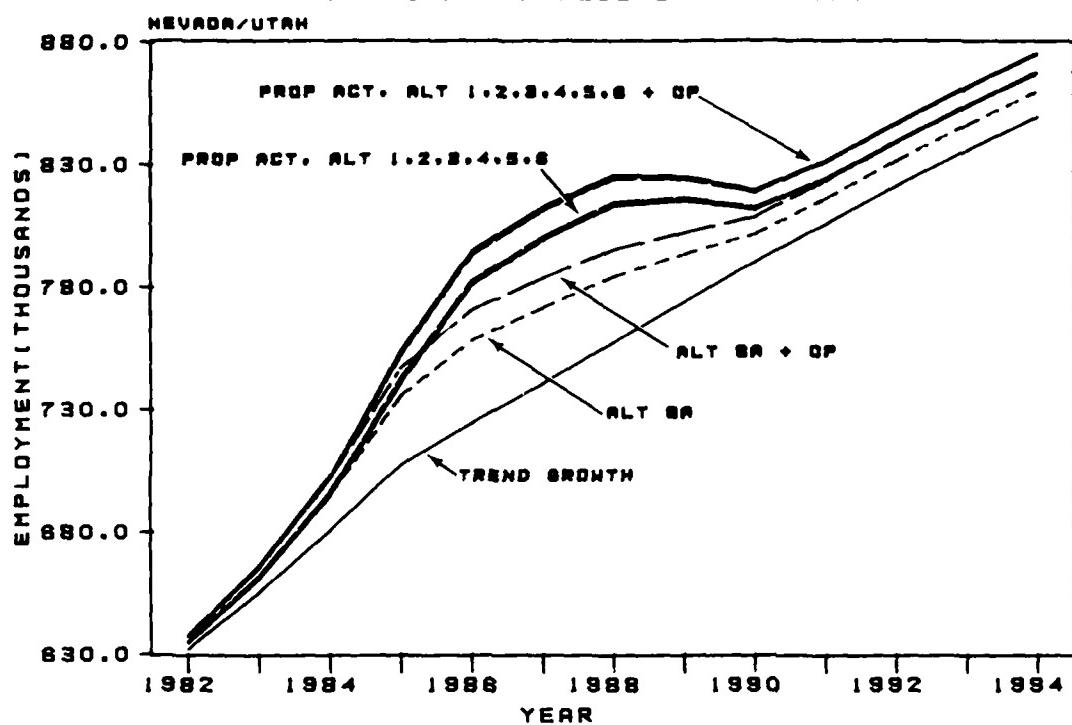
Clark County, Nevada, site of the larger operating base at Coyote Spring, is projected to receive more of the project's employment impacts than any other



CA-0003-A

Figure 4.3.2.1-2. (Page 1 of 6)

EMPLOYMENT GROWTH WITHOUT M-X, WITH M-X,
AND WITH M-X PLUS OTHER PROJECTS



EMPLOYMENT GROWTH WITHOUT M-X AND WITH M-X

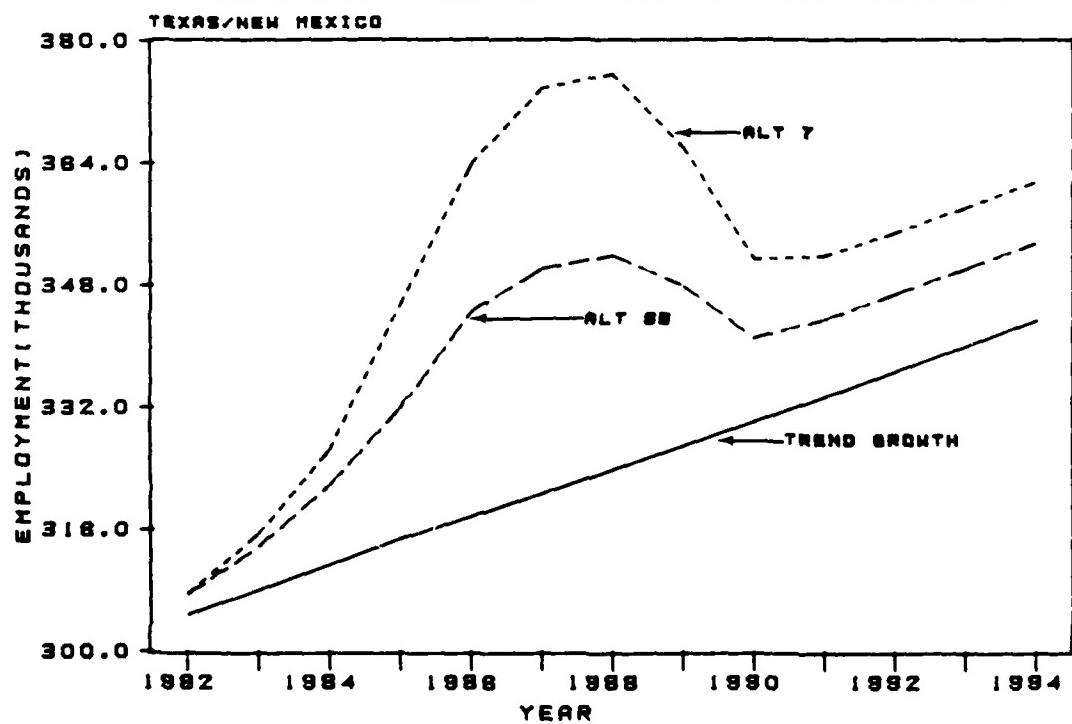


Figure 4.3.2.1-2. (Page 2 of 6)

CA-0004-A

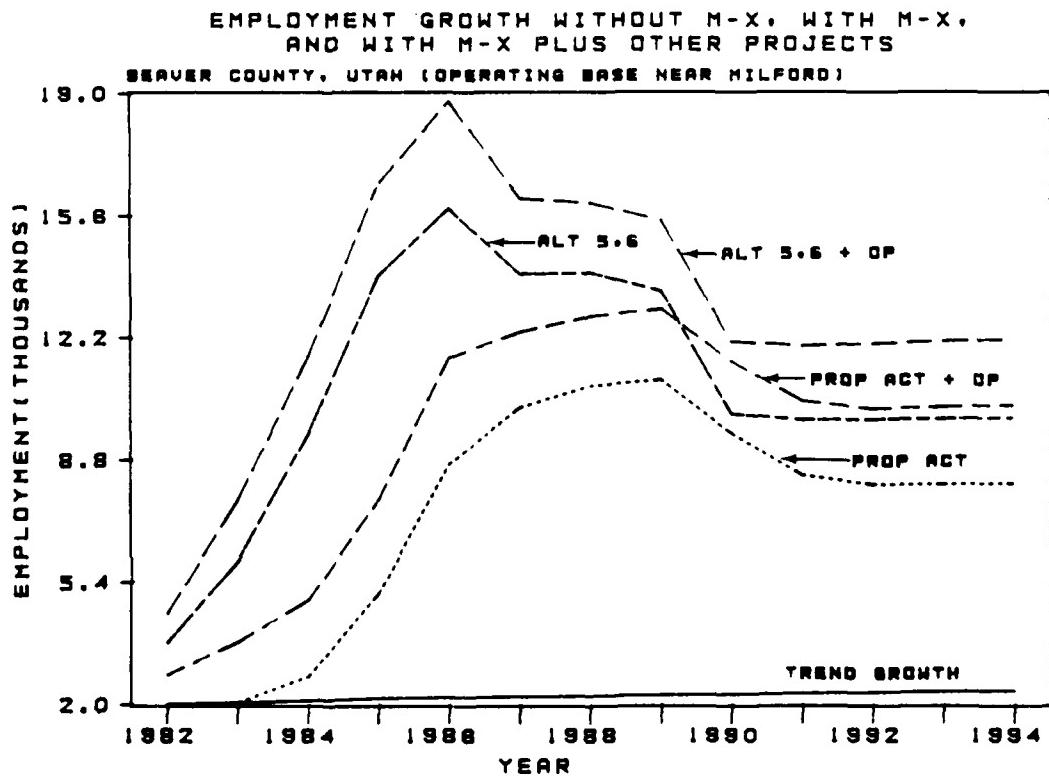
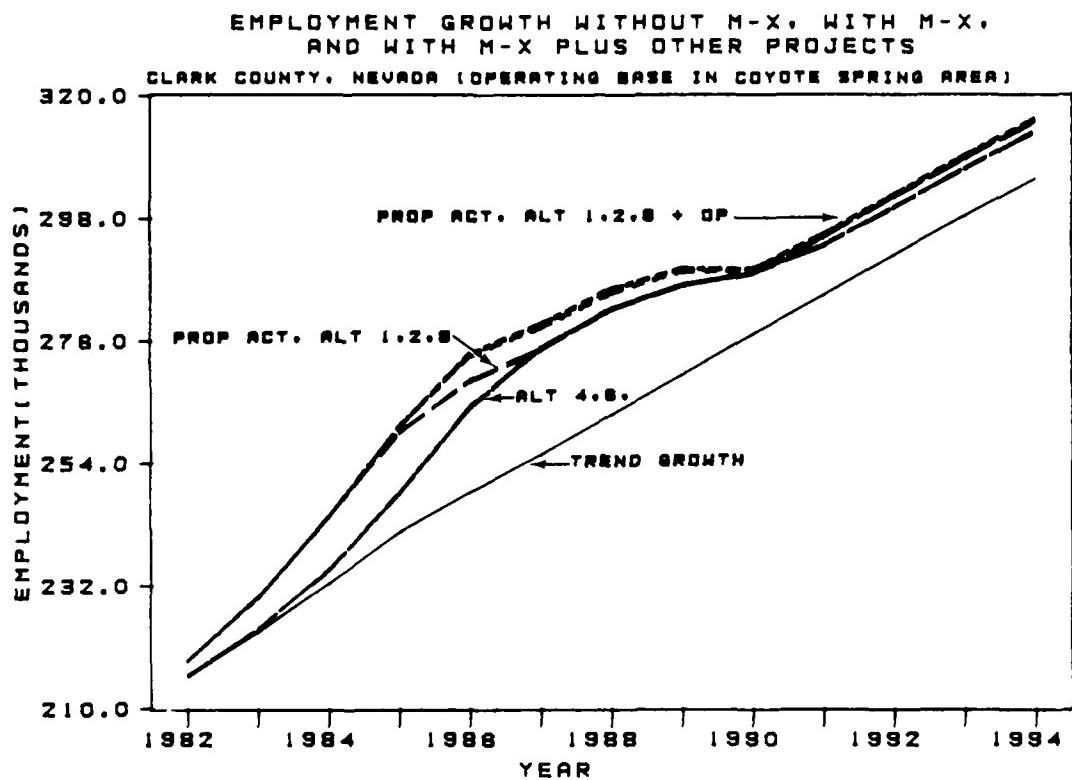


Figure 4.3.2.1-2. (Page 3 of 6)

CA-0005-A

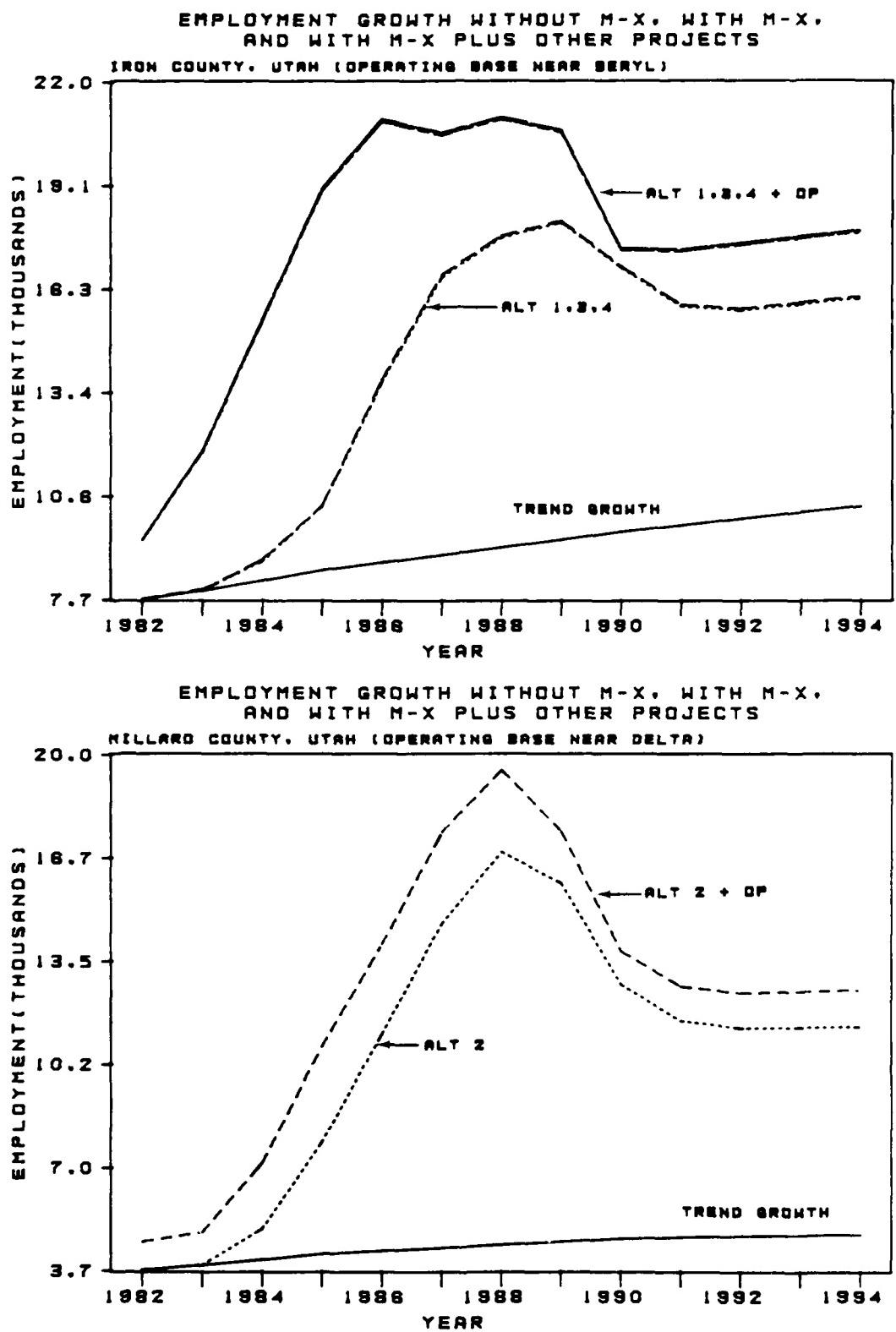


Figure 4.3.2.1-2. (Page 4 of 6)

CA-0006-A

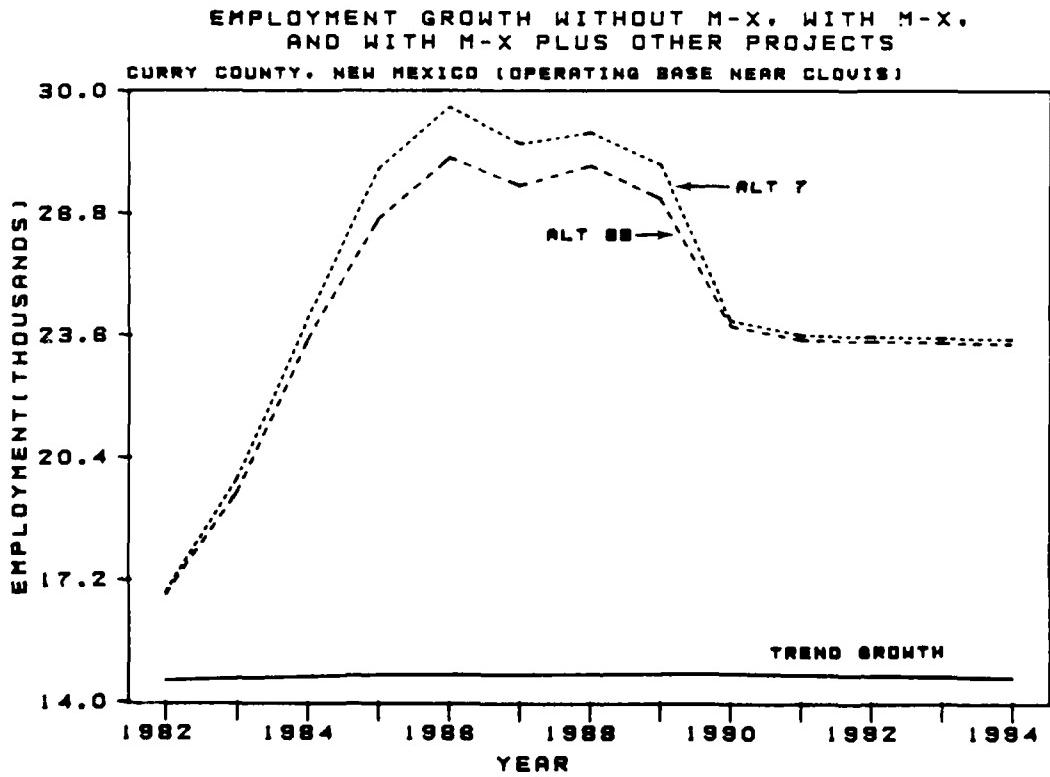
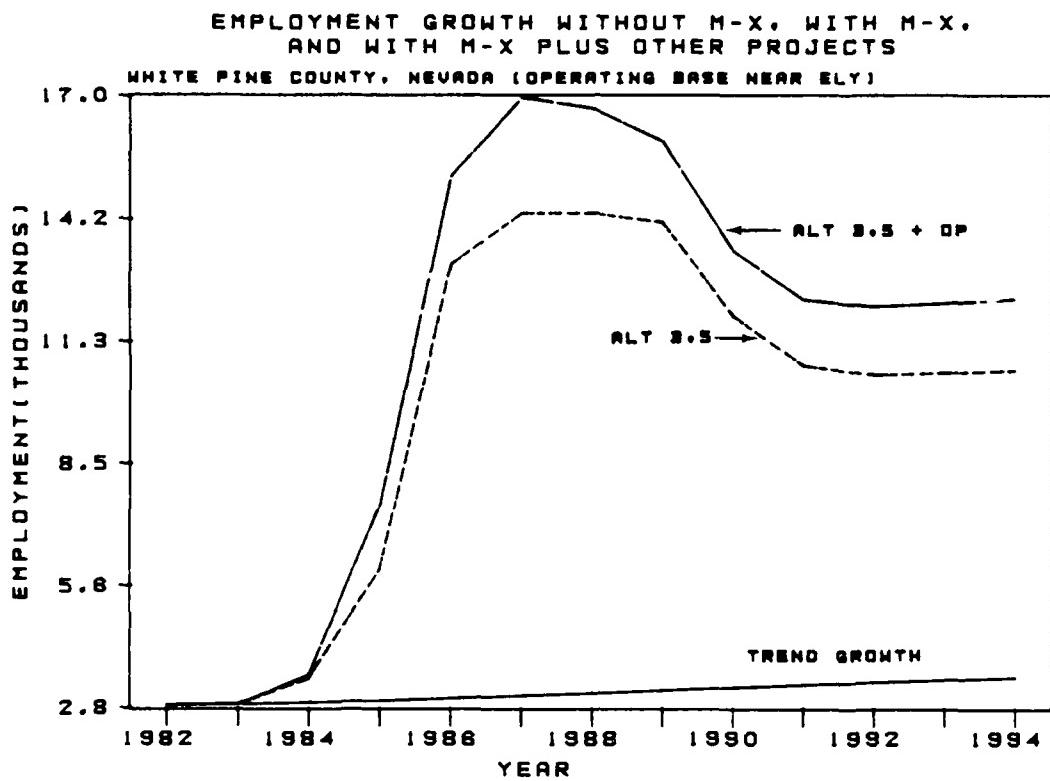


Figure 4.3.2.1-2. (Page 5 of 6)

CA-0007-A

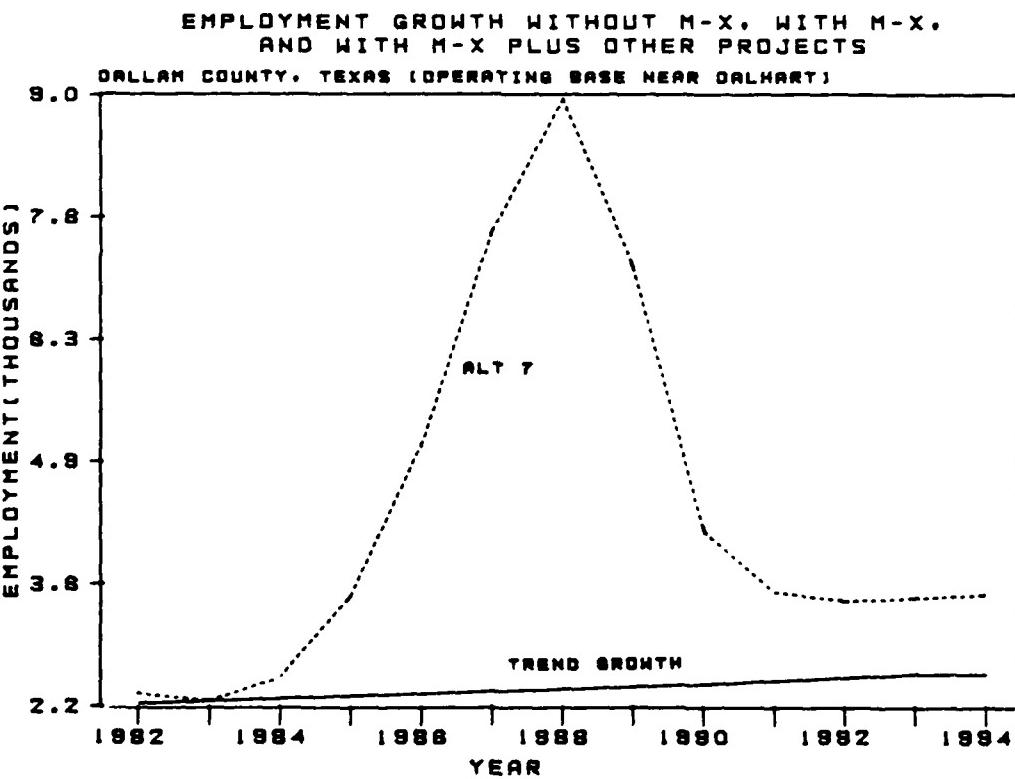
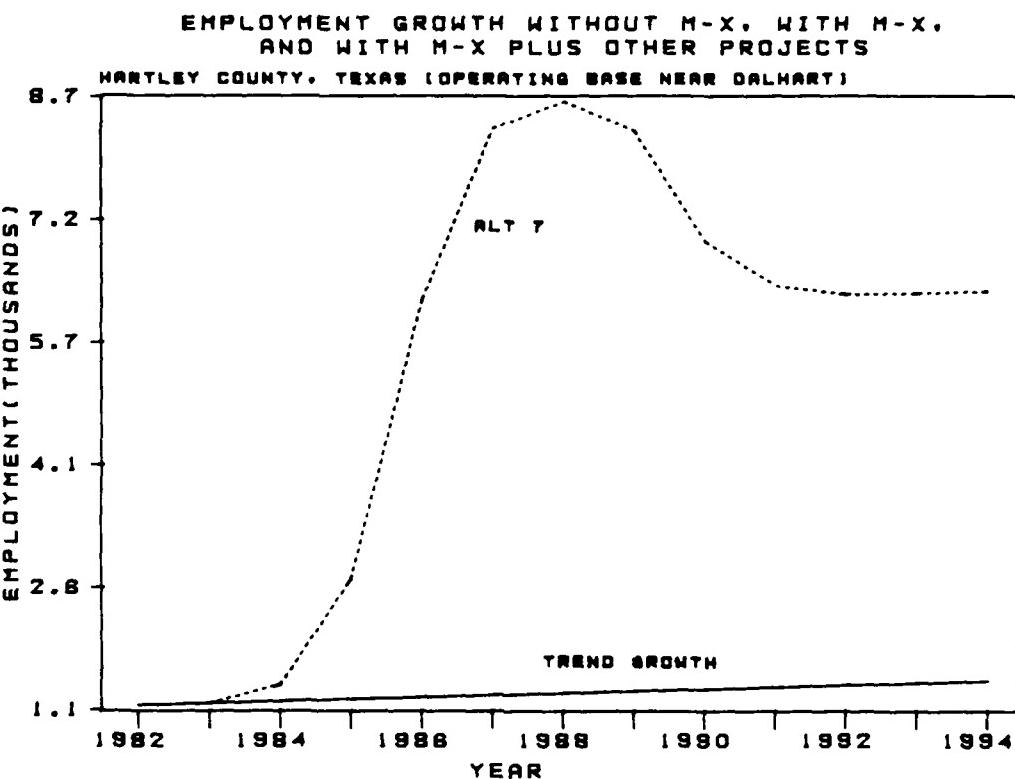


Figure 4.3.2.1-2. (Page 6 of 6)

Table 4.3.2.1-1. (page 1 of 3)

NEVADA/UTAH
TOTAL EMPLOYMENT CHANGE (BY PLACE OF RESIDENCE)

DEPLOYMENT REGION		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
PROP. ACTION	59,876 (-6.1)	18,248 (2.2)
1	59,977 (+0.1)	18,242 (-1.2)
2	59,703 (-6.1)	18,218 (-1.1)
3	58,596 (-7.4)	17,854 (-1.1)
4	59,869 (-6.1)	18,175 (-1.2)
5	58,914 (-0.9)	17,860 (-1.1)
6	59,784 (-6.1)	18,160 (-1.2)
8 A	33,627 (-4.6)	10,343 (1.3)
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)	
PROP. ACTION	72,074 (-9.7)	25,944 (3.1)
1	72,175 (-9.7)	25,936 (3.1)
2	71,903 (-9.7)	25,914 (3.1)
3	70,796 (-9.6)	25,550 (3.1)
4	72,067 (-9.7)	25,671 (3.1)
5	70,712 (-9.5)	25,556 (3.1)
6	71,962 (-9.7)	25,876 (3.1)
8	29,991 (-4.1)	3,251 (0.4)

CLARK COUNTY, NV.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
PROP. ACTION	24,623 (-9.9)	10,657 (3.7)
1	24,696 (-9.9)	10,686 (-3.7)
2	24,343 (-9.8)	10,334 (-1.7)
3	8,593 (-3.5)	656 (-1.1)
4	18,849 (-7.4)	8,326 (-1.8)
5	8,515 (-3.4)	617 (-1.2)
6	18,825 (-7.4)	8,287 (-1.8)
8 A	19,826 (6.0)	17,164 (-3.5)
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)	
PROP. ACTION	24,023 (-9.9)	10,657 (-3.7)
1	0 (0)	0 (0)
2	0 (0)	0 (0)
3	0 (0)	0 (0)
4	0 (0)	0 (0)
5	0 (0)	0 (0)
6	0 (0)	0 (0)
8	0 (0)	0 (0)

EUREKA COUNTY, NV.

ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
PROP. ACTION	3,468 (-536.0)	0 (0)
1	3,468 (-536.0)	0 (0)
2	3,468 (-536.0)	0 (0)
3	3,468 (-536.0)	0 (0)
4	3,468 (-536.0)	0 (0)
5	3,468 (-536.0)	0 (0)
6	3,468 (-536.0)	0 (0)
8 A	2 (-602.3)	0 (0)
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)	
PROP. ACTION	3,568 (-652.0)	0 (0)
1	3,568 (-652.0)	0 (0)
2	3,568 (-652.0)	0 (0)
3	3,568 (-652.0)	0 (0)
4	3,568 (-652.0)	0 (0)
5	3,568 (-652.0)	0 (0)
6	3,568 (-652.0)	0 (0)
8	162 (-12.7)	0 (0)

LINCOLN COUNTY, NV.

ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
PROP. ACTION	2,585 (141.6)	216 (10.7)
1	2,690 (147.4)	296 (14.7)
2	2,539 (139.1)	148 (-7.3)
3	2,633 (144.3)	227 (11.1)
4	2,740 (150.1)	311 (15.4)
5	2,459 (134.7)	116 (-5.7)
6	2,567 (140.7)	200 (-9.9)
8 A	1,955 (109.2)	144 (-7.1)
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)	
PROP. ACTION	2,587 (141.8)	216 (10.8)
1	2,692 (147.5)	300 (14.8)
2	2,541 (139.2)	150 (-7.4)
3	2,635 (144.4)	229 (11.0)
4	2,742 (150.2)	313 (15.5)
5	2,461 (134.8)	118 (-5.8)
6	2,569 (140.8)	202 (10.0)
8	1,857 (-92.2)	146 (-7.2)

Table 4.3.2.1-1. (page 2 of 3)

NEVADA/UTAH		
TOTAL EMPLOYMENT CHANGE (BY PLACE OF RESIDENCE)		
NYE COUNTY, NV.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
		M-X INDUCED CHANGE (% above normal growth baseline)
PROP. ACTION	4,317 (142.7)	0 (-10)
1	4,317 (142.7)	0 (-10)
2	4,317 (142.7)	0 (-10)
3	4,317 (142.7)	14 (+6)
4	4,317 (142.7)	0 (-10)
5	4,317 (142.7)	14 (+6)
6	4,317 (142.7)	0 (-10)
7	4,317 (142.7)	0 (-10)
ALTER-NATIVE		M-X PLUS OTHER PROJECTS (% above normal growth baseline)
PROP. ACTION	4,317 (142.7)	0 (-10)
1	4,317 (142.7)	0 (-10)
2	4,317 (142.7)	0 (-10)
3	4,317 (142.7)	0 (-10)
4	4,317 (142.7)	0 (-10)
5	4,317 (142.7)	0 (-10)
6	4,317 (142.7)	0 (-10)
7	4,317 (142.7)	0 (-10)

WHITE PINE COUNTY, NV.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
		M-X INDUCED CHANGE (% above normal growth baseline)
PROP. ACTION	4,317 (142.7)	0 (-10)
1	4,317 (142.7)	0 (-10)
2	4,317 (142.7)	0 (-10)
3	11,216 (363.6)	7,137 (+21.3)
4	4,317 (142.7)	0 (-10)
5	11,216 (363.6)	7,137 (+21.3)
6	4,317 (142.7)	0 (-10)
7	4,317 (142.7)	0 (-10)
ALTER-NATIVE		M-X PLUS OTHER PROJECTS (% above normal growth baseline)
PROP. ACTION	6,317 (211.1)	0 (-10)
1	6,317 (211.1)	0 (-10)
2	6,317 (211.1)	0 (-10)
3	13,847 (450.1)	8,745 (271.4)
4	6,317 (211.1)	0 (-10)
5	13,847 (450.1)	8,745 (271.4)
6	6,317 (211.1)	0 (-10)
7	6,317 (211.1)	0 (-10)

BEAVER COUNTY, UT.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
		M-X INDUCED CHANGE (% above normal growth baseline)
PROP. ACTION	1,256 (13.7)	887 (+8.3)
1	1,256 (13.7)	117 (-21.1)
2	1,256 (13.7)	43 (-1.0)
3	1,256 (13.7)	681 (29.1)
4	1,256 (13.7)	881 (29.1)
5	1,256 (13.7)	1,091 (324.6)
6	1,256 (13.7)	1,091 (324.6)
7	1,256 (13.7)	1,091 (324.6)
ALTER-NATIVE		M-X PLUS OTHER PROJECTS (% above normal growth baseline)
PROP. ACTION	1,256 (13.7)	1,256 (13.7)
1	1,256 (13.7)	1,256 (13.7)
2	1,256 (13.7)	1,256 (13.7)
3	1,256 (13.7)	1,256 (13.7)
4	1,256 (13.7)	1,256 (13.7)
5	1,256 (13.7)	1,256 (13.7)
6	1,256 (13.7)	1,256 (13.7)
7	1,256 (13.7)	1,256 (13.7)

IRON COUNTY, UT.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
		M-X INDUCED CHANGE (% above normal growth baseline)
PROP. ACTION	1,256 (13.7)	887 (+8.3)
1	8,745 (53.6)	8,745 (53.6)
2	481 (-4.8)	24 (-1.1)
3	12,172 (139.4)	7,561 (27.0)
4	12,172 (139.4)	7,561 (27.0)
5	12,172 (139.4)	1,168 (-11.7)
6	12,172 (139.4)	1,168 (-11.7)
7	394 (-4.4)	0 (-10)
ALTER-NATIVE		M-X PLUS OTHER PROJECTS (% above normal growth baseline)
PROP. ACTION	1,214 (14.4)	936 (+9.4)
1	9,816 (54.1)	8,794 (52.8)
2	481 (-3.6)	72 (-0.7)
3	12,244 (140.2)	7,610 (28.5)
4	12,244 (140.2)	7,610 (28.5)
5	12,244 (140.2)	1,217 (11.2)
6	12,244 (140.2)	1,217 (11.2)
7	664 (-7.4)	0 (-10)

Table 4.3.2.1-1. (page 3 of 3)

NEVADA/UTAH

TOTAL EMPLOYMENT CHANGE (BY PLACE OF RESIDENCE)

JUAB COUNTY, UT.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	% above normal growth baseline	
PROP. ACTION	1,741 (1.1%)	
1	1,741 (1.1%)	
2	1,741 (1.1%)	27 (-1.4)
3	1,741 (1.1%)	
4	1,741 (1.1%)	27 (-1.4)
5	1,741 (1.1%)	
6	1,741 (1.1%)	
8A	1,741 (1.1%)	27 (-1.4)
 ALTER-NATIVE % above normal growth baseline		
PROP. ACTION	1,741 (1.1%)	27 (-1.4)
1	1,741 (1.1%)	27 (-1.4)
2	1,741 (1.1%)	27 (-1.4)
3	1,741 (1.1%)	27 (-1.4)
4	1,741 (1.1%)	27 (-1.4)
5	1,741 (1.1%)	27 (-1.4)
6	1,741 (1.1%)	27 (-1.4)
8	1,741 (1.1%)	27 (-1.4)

MILLARD COUNTY, UT.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	% above normal growth baseline	
PROP. ACTION	3,241 (7.1%)	
1	3,241 (7.1%)	
2	3,241 (7.1%)	43 (-1.4)
3	3,241 (7.1%)	
4	3,241 (7.1%)	43 (-1.4)
5	3,241 (7.1%)	
6	3,241 (7.1%)	
8A	3,241 (7.1%)	43 (-1.4)
 ALTER-NATIVE % above normal growth baseline		
PROP. ACTION	3,241 (7.1%)	43 (-1.4)
1	3,241 (7.1%)	43 (-1.4)
2	3,241 (7.1%)	43 (-1.4)
3	3,241 (7.1%)	43 (-1.4)
4	3,241 (7.1%)	43 (-1.4)
5	3,241 (7.1%)	43 (-1.4)
6	3,241 (7.1%)	43 (-1.4)
8	3,241 (7.1%)	43 (-1.4)

UTAH/SALT LAKE COUNTY, UT.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	% above normal growth baseline	
PROP. ACTION	11,694 (1.4)	438 (1.1)
1	11,694 (1.4)	360 (-1.1)
2	11,694 (1.4)	73 (-1.1)
3	11,694 (1.4)	773 (-1.2)
4	11,694 (1.4)	476 (-1.1)
5	11,694 (1.4)	876 (-1.1)
6	11,694 (1.4)	974 (-1.1)
8A	11,694 (1.4)	974 (-1.1)
 ALTER-NATIVE % above normal growth baseline		
PROP. ACTION	13,815 (1.1)	4,466 (-1.1)
1	13,815 (1.1)	4,366 (-1.1)
2	13,815 (1.1)	4,376 (-1.1)
3	13,815 (1.1)	4,376 (-1.1)
4	13,815 (1.1)	4,376 (-1.1)
5	13,815 (1.1)	4,376 (-1.1)
6	13,815 (1.1)	4,376 (-1.1)
8	13,815 (1.1)	4,376 (-1.1)

WASHINGTON COUNTY, UT.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	% above normal growth baseline	
PROP. ACTION	422 (4.7)	
1	422 (4.7)	
2	422 (4.7)	14 (-1.7)
3	422 (4.7)	
4	422 (4.7)	14 (-1.7)
5	422 (4.7)	
6	422 (4.7)	14 (-1.7)
8	422 (4.7)	14 (-1.7)
 ALTER-NATIVE % above normal growth baseline		
PROP. ACTION	422 (4.7)	237 (-1.1)
1	422 (4.7)	237 (-1.1)
2	422 (4.7)	14 (-1.7)
3	422 (4.7)	237 (-1.1)
4	422 (4.7)	237 (-1.1)
5	422 (4.7)	237 (-1.1)
6	422 (4.7)	237 (-1.1)
8	422 (4.7)	237 (-1.1)

Employment and Labor Force--Proposed Action

county in the region. After adjustment for cross-county commuting, a peak of 24,600 jobs is projected for Clark County in 1986, almost 10 percent of projected county baseline employment, and 14 percent of 1978 county employment (labor force concept) of 169,500 persons. In the long run, M-X would generate 10,700 jobs (including military) in Clark County, about 3.5 percent of projected baseline employment. The direct M-X jobs and some of the indirect jobs would be created at the OB site itself, and many additional indirect jobs would be created in Las Vegas.

Peak construction employment at the OB (2,300 workers) would amount to 17 percent of all construction employment in Clark County in 1978. This large relative labor demand for construction would probably result in temporary labor shortages, wage escalation, and large-scale worker in-migration. Labor force in-migration into the county also is likely to occur to fill jobs indirectly related to the project, for assembly and checkout at the base, and to provide the military and civilian personnel needed to operate the base. Cumulative civilian labor force in-migration of over 11,500 workers is projected at the peak of activity in 1986.

Beaver County, Utah, would experience large, sustained increases in employment as a result of an OB at Milford. In 1989, Beaver County would receive peak M-X-related employment of 8,800 jobs, declining to a long-term level of 5,800 in the long run. (These estimates have been adjusted for cross-county commuting; a number of the workers on the base are assumed to reside in nearby Iron County, Utah.) Peak M-X employment is almost 400 percent of projected baseline employment in 1989, and almost 450 percent of actual employment (labor force concept) in Beaver County in 1979. The project would induce average employment growth in the county of more than 30 percent annually from 1983 through 1989. By comparison, Sweetwater County, Wyoming, a frequently cited example of unmanaged growth, experienced average employment growth of 27 percent per year from 1971-1974 due to rapid energy development in the area.

This rapid growth would transform the economy of Beaver County in a relatively short period of time. One-third of the county's labor force presently is employed in agriculture, with local government and retail trade representing the only other major employment sectors. This slow-growing, agriculture-dependent local economy could be converted in less than a decade into a predominantly service and trade economy serving the newly established M-X OB. If sufficient water can be provided to operate the OB without diverting water from other users, actual declines in agricultural activity are not likely. However, the relative importance of the agricultural sector could be reduced.

The University of Utah's Bureau of Economic and Business Research has indicated the possibility of significant amounts of molybdenum mining, alunite mining and processing, and geothermal power development in Beaver County during this same time period. If these developments are included in the projections along with M-X deployment, employment in 1989 is projected to be 10,800 jobs above trend-growth conditions. This additional 2,000 jobs from non-M-X sources implies a cumulative employment impact relative to the 1989 trend-growth projection of almost 500 percent.

Rapid growth in employment creates particular problems in rural areas with little or no developed economic base for accommodating rapid growth. Economic dislocation and localized inflation of wages, prices, and land values, would neces-

Employment and Labor Force--Proposed Action

sarily accompany this rapid growth and economic structure change. The extent of this dislocation will depend in part on the degree of planning and growth management which occurs to assist in the most rapid and successful adjustment possible.

Other counties also would experience sharply defined boom-growth episodes. In contrast with Beaver County, however, some of these counties would undergo periods of rapid "bust" as well. In Eureka County, Nevada, DDA construction would create peak employment of 3,500 in 1988, more than five times the county's projected baseline employment in that year. Within two years, project-related employment would be reduced to zero, and total employment in the county would decline to its baseline level of less than 700 persons. Localized wage-price escalation and shortages of labor and material could be significant during the period from 1986-89. Very little concurrent growth is expected in the county from other large projects.

Nye County would experience similar stresses from rapid employment growth, with M-X-related employment peaking in 1988 at 6,400 jobs. This would represent almost a tripling of county employment from trend-growth projections for that year.

It is likely that spillover impacts from the OB at Coyote Spring would augment DDA construction effects on employment in Lincoln County, Nevada. M-X employment of persons permanently or temporarily residing in Lincoln County would reach almost 2,600 jobs in 1986, then decline to about 200 jobs after 1990. These impacts would represent 140 percent of baseline employment at the peak and 10 percent of projected employment in the long run. No other large projects are expected to affect this county.

In Utah counties of Iron, Millard, and, to a lesser extent, Juab also would experience DDA and OB spillover employment impacts. In all three cases, long-term growth is not expected to be large enough to significantly alter the local economies involved. Short-term boom-type employment conditions, however, are projected for both Millard and Juab counties. Cumulative employment impacts from other projects could exacerbate the negative aspects of this growth in Millard County, where the Intermountain Power Project would be located. M-X would produce a peak of 3,400 jobs in 1988 in Millard County, while M-X combined with other projects would generate 6,000 jobs over the trend-growth baseline. Cumulative impacts of M-X deployment and other projects in the county would amount to almost 140 percent of projected trend-growth employment in 1988.

A total of 10,700 M-X-related jobs would be created in Salt Lake and Utah counties, Utah, in the peak year of 1987, representing only about 2 percent of baseline employment in that year. Long-term employment impacts in the Salt Lake City-Provo metropolitan areas would amount to only a few hundred jobs, less than 1 percent of long-term projected employment. The cumulative effects of M-X and other projects would not significantly alter these results.

Mitigations

The extent and severity of economic dislocation resulting from these episodes of rapid, large-scale growth depend on the strategies adopted to mitigate the adverse effects of this growth. Mitigative strategies could center on project design changes, economic development planning, and implementation and planning assis-

tance funds. Project design changes, could include basing of personnel required for the three area support centers (ASCs) at locations other than OBs as this study assumes. Roughly 300 persons per ASC would be required, as would local procurement for food and other supplies. Geographic dispersal of personnel would tend to redistribute the workers, their families, and their expenditures away from OB communities, reducing stress on local labor markets and generating smaller-scale growth in other communities.

Introduction or increased usage of labor-saving technologies for both construction and operations also could decrease labor demands. Long distance commuting programs rather than inducing workers to live in rural communities could serve much the same purpose, and could be particularly important during DDA construction. Alternatively, programs with direct incentives for construction workers to locate their families in the metropolitan areas of Las Vegas or Salt Lake City - Provo also would minimize short run boom growth in rural counties experiencing DDA construction.

Economic development planning activities could include extensive federal, state, and local preplanning and impact aid assistance. Any local industrial expansion could be time-phased so as to smooth out growth peaks, lessening chances of labor or materials shortages or rapid escalation of their prices. This could be particularly important where competition for resources arises between M-X and other projects, e.g., IPP in Millard County. To meet initial demands, extensive importation of labor, and other resource inputs, as well as final goods, would reduce local market stress. Planning investments in industrial capacity consistent with long-run area needs, such as small scale business parks, or restaurants and motels, would lessen declines in project activity in the area. This is less appropriate in those rural areas where only technical facilities are planned where short-run adjustments such as importing goods and services may be a more appropriate way to cope with project needs. In these areas, no expansion of the local industrial base could reasonably be expected to supply the demands of the project, while overexpansion would lead to "bust-type" recession problems.

Local residents and businesses should also be made an integral part of community growth management planning. Job skill improvement seminars, information dissemination, worker relocation assistance, and contract negotiation classes, for example, coordinated by federal, state, and local manpower economic development specialists, would be required.

ALTERNATIVE 1 (4.3.2.1.3)

Under Alternative 1, the second OB would be located at Beryl Junction in Iron County. Since the timing and magnitude of employment and other project materials requirements remain virtually unchanged, peak and long-term impacts for the region as a whole and for most counties are forecast to be almost identical to the Proposed Action. Only Iron, Beaver, and Washington counties would experience impacts different from those of the Proposed Action (Table 4.3.2.1-1).

Employment growth shifts from Beaver to Iron County under this alternative. Total employment in Iron County is forecast to peak at about 8,800 in 1989, representing almost a 100 percent increase above baseline growth forecasts. By comparison, only about 1,300 jobs were projected for the county under the Proposed

Employment and Labor Force--Alternative 2

Action. Over the long term, employment by place of residence is projected to equal about 5,700 jobs, almost 60 percent of the baseline forecast of about 9,900 persons in 1992. This figure is about 5,000 above long-run employment forecast under the Proposed Action. Few large additional projects are projected for the same time period in Iron County.

Cedar City is the largest community in the county, and would likely experience much of the local growth. The county itself has been characterized by the dominance of the government sector, with agriculture also a relatively important industry (Bureau of Economic Analysis, April 1979). Even though the county has experienced employment growth of 3.8 percent per year over the 1967-1977 period, the extremely sharp buildup of employment in the county would create significant economic dislocations. These would include local wage and price inflation, shortages in key occupations such as construction trades, and large in-migration of project employees. Growth of ancillary industries to supply consumption demands and OB procurement needs would change the county's economic structure. Increased numbers of hotels, restaurants, clothing stores, and chain-type supermarkets, for example, would characterize this boom-type growth.

Just as Iron County's employment would be greater under this alternative than for the Proposed Action, Beaver County's employment could be less. However, peak employment still is projected to equal about 100 percent of 1986 baseline employment projections, and such rapid growth would generate a short-term economic boom growth episode. However, long-term employment growth is projected at only 500 jobs under this alternative, 5,000 less than under the Proposed Action. The county could much more readily assimilate such modest growth without radical changes in economic structure.

Potential marginal increases in the cities of Pioche, Panaca, and Caliente and probable spillover effects of the second OB into Washington County to the south produce the only other important differences between Alternative 1 and the Proposed Action. At most, the Washington County increase in employment due to M-X would be 900 jobs under Alternative 1, 8.5 percent of projected employment in 1988. Over the long run, total employment would increase by about 600 jobs as an indirect result of Alternative 1. Though the county is not large, it would be able to assimilate such employment growth without sizable dislocation. Detailed graphical analysis of employment impacts for this alternative are presented in Figure 4.3.2.1-2.

ALTERNATIVE 2 (4.3.2.1.4)

Under Alternative 2, the second OB would be located at Delta in Millard County. Since the timing and magnitude of employment and project materials requirements are forecast to remain virtually the same as the Proposed Action, peak and long-term impacts for the region as a whole and most ROI counties are projected to remain virtually constant. Iron, Beaver, and Washington counties experience smaller employment effects than under the Proposed Action, while Millard County grow more dramatically (Table 4.3.2.1-1).

Employment growth shifts from Beaver to Millard County, where total M-X-related employment is forecast to peak at 12,400 in 1988, representing almost 300 percent of trend growth projections. This is over 9,000 jobs more than the

county would experience under the Proposed Action. Long-term employment by place of residence is projected to equal 6,600 jobs, or 135 percent of the trend-growth forecast of 4,800 in 1992. This figure is about 6,400 above long-term employment projected under the Proposed Action.

Cumulative employment impacts from other projects could exacerbate growth stress in this county. In particular, the IPP, scheduled to be located in Millard County in the same time period as M-X, will greatly increase county employment. Including IPP and other smaller projects, employment in 1988 would be 15,100 jobs, (or 340 percent above the trend-growth forecast). This is roughly 2,700 more jobs than with M-X alone. Over the long run, these other projects affect employment less; compared to the 1992 M-X growth figure of 6,600 jobs, IPP and other projects add about 1,100 more jobs.

Delta and a number of nearby small communities would likely experience much of the local growth stress. The county itself has been characterized by the dominance of the agricultural and government sectors, with other industries, e.g., manufacturing, services, and construction having been relatively unimportant (Bureau of Economic Analysis, April 1979). Having historically experienced a modest employment growth, 1.5 percent per year over the 1967-1977 period, the very rapid buildup of employment in the county would create significant economic dislocations. These would include wage and price inflation, shortages in key occupations such as construction trades, and large in-migration of project employees. Growth of ancillary industries to supply consumption demands and OB procurement needs would change the county's economic structure.

Beaver County would experience less employment growth under Alternative 2 than with the Proposed Action. However, peak employment due to M-X still would be about 2,300 jobs, equal to 1986 trend-growth projected employment. Such rapid growth would generate a short-term economic boom. However, long-term employment growth is forecast to equal only about 350 jobs under this alternative, so the county would undergo a substantial employment reduction phase as well. Long-term employment would be 5,400 less than under the Proposed Action. The county would have little difficulty assimilating such modest long-term growth, though the boom-bust period associated with DDA construction still could cause significant short-term adjustment problems.

ALTERNATIVE 3 (4.3.2.1.5)

Under Alternative 3, the first OB would be located near Beryl (Iron County), Utah, and the second OB, in the vicinity of Ely (White Pine County), Nevada. Since the timing and magnitude of employment and project materials requirements would be virtually the same as for the Proposed Action, peak and long-term impacts for the Nevada/Utah region as a whole would not be significantly different. Designated deployment area counties would be relatively unaffected by the shift of base locations, so the analysis given above for Eureka, Lincoln, Nye and Juab counties would not change. Compared to the Proposed Action, M-X-related employment would be less in Clark and Beaver counties, while it would be greater in Iron and White Pine counties (Table 4.3.2.1-1). Slight spillover effects from OB operations under this alternative are observed in Beaver and Washington counties.

For Alternative 3, employment impacts were estimated using two different methodologies. The first of these applies the county-level interindustry models used

Employment and Labor Force--Alternative 3

to analyze all the deployment options considered in this report. The second approach utilizes a dynamic economic-base simulation model developed by the University of Utah, Bureau of Economic and Business Research. The results of the simulation analysis provide a useful basis of comparison for the interindustry-model results.

At the regional level, the interindustry analysis indicates a peak employment increase of 58,600 jobs in 1987 under Alternative 3, while long-term (1994) employment is 17,900 higher than baseline projections. The simulation approach indicates a substantially lower peak impact of 51,400 jobs and a marginally higher long-term change (19,000 jobs). Relative to baseline employment projections, however, these differences are inconsequential.

Impact estimates for individual counties also are sensitive to the modeling approach used. Iron and White Pine counties are projected to experience large employment changes in each case because of the OBs located there. Peak interindustry employment estimates for these counties are 28-35 percent higher than the simulation estimates but the long-term estimates from both approaches are more similar. In most DDA counties (Eureka, Lincoln, Nye, Juab, and Millard) however, the simulation results tend to be higher by 28-35 percent or more than interindustry impact estimates. These variations in results are attributable to general methodological differences, particularly:

- o The sensitivity of the interindustry results to assumptions about wage rates and the regional distribution of direct expenditures
- o the relationship between employment and population that underlies the simulation approach.

However, these variations are indicative of the general level of uncertainty regarding the spatial distribution of project impacts. Because the interindustry analysis has been consistently applied to all the deployment options considered here, the results of this analysis form the basis for all socioeconomic impacts discussed in this report.

In Iron County, peak employment by place of residence is forecast to equal 12,200 jobs in 1986, 140 percent of trend-growth employment projections of 8,700 jobs. This peak level is almost 11,000 jobs above that forecast under the Proposed Action. Over the long-run, M-X induced change in employment (by place of residence) would equal 7,600 jobs. This represents a 75 percent increase above baseline employment forecast for that period, and is 6,700 jobs above long-term forecasts of M-X-related employment under the Proposed Action. No large additional projects in Iron County appear likely during the same time period.

Iron County employment traditionally has been dominated by government, agriculture, and services. Historically, the county has grown at rates comparable to those of the western United States as a whole, posting 3.8 percent annual employment growth rate over the 1967-1977 period. The county as a whole would experience boom-type growth, given the projected rapid build-up of M-X employment. Cedar City currently is the only town of any size in the county. Beryl would expand greatly as a result of M-X. These and other communities would experience skilled labor shortages, general wage inflation, and a large in-migration of project

workers. Over the short-term, this in-migration would consist of construction and assembly and checkout workers, while over the long run, military personnel would account for much of the employment growth.

White Pine County would exhibit a growth pattern comparable to Iron County, but employment totals would be slightly less. Compared to the Proposed Action, M-X-related employment would peak one year later, in 1987, at 11,200 jobs. This figure is more than 350 percent above the employment projection, and 6,900 above peak employment under the Proposed Action. Over the long run, 7,100 jobs would be created for residents of White Pine County; this is 200 percent above long-term trend-growth projections. Under the Proposed Action, with only DDA facility construction, in White Pine County, short-run boom-type growth was projected for the county. With Alternative 3, employment growth is more rapid and much greater, but it is more stable over the long run.

Historically, the county has had an economy dominated by government and mining employment, and has exhibited a modest employment growth rate, 1.2 percent per year, over the 1967-1977 period. Trend-growth projections presume a continuation of these historic trends. There is a significant probability that other projects, notably the reopening of Kennecott Copper Company mine near Ruth and the construction and operation of the White Pine Power Project, would alter this stagnant long-term picture. Employment forecasts including these projects in addition to M-X, add about 2,000 more jobs in 1987, and about 1,600 additional jobs after 1990. White Pine County would not easily assimilate growth of the magnitude projected under M-X in Alternative 3. This problem could be particularly serious in the early years and is worsened by including the cumulative effects of other projects.

Peak employment in Clark County is 8,600 jobs in 1986, only 4 percent of the baseline projection. This is a reduction of 16,000 jobs compared to peak employment with the Proposed Action. Over the long run, only 650 M-X-related jobs are forecast for the county, a decline of about 10,000 from long-term levels forecast for the Proposed Action. Much less long-run growth stimulus would be experienced by the county; and the short-run impacts would be smaller as well. There would be little direct impact from OB personnel and less OB procurement would be supplied from Clark County.

ALTERNATIVE 4 (4.3.2.1.6)

Under Alternative 4, the first OB would be located in Beryl, Iron County, and the second OB, at Coyote Spring, Clark County. Since the timing and magnitude of employment and project materials requirements remain virtually the same as for the Proposed Action, peak and long-term impacts for the Nevada/Utah region as a whole are forecast to remain virtually constant. DDA counties would be largely unaffected by the shift of base locations, and would experience boom-bust impacts similar to those induced by the Proposed Action. Employment impacts would be less in Clark County than they would be with the Proposed Action, since a smaller OB would be sited there. Impacts also would be less in Beaver County, no longer a OB location, and increase dramatically in Iron County. Slight spillover effects from OB operations under this alternative are observed in Beaver and Washington counties; in both cases, differences in effects between this alternative and the Proposed Action are expected to be minor.

Employment and Labor Force--Alternative 5

Employment impacts in Iron County under Alternatives 3 and 4 would be identical, because both use Beryl as the site of the larger OB. The county would undergo extremely rapid, large-scale employment growth from 1982 to 1986, with a sharp employment decline after 1989. Long-term M-X-related employment of 7,600 persons still would provide a stable economic base during the operations phase.

Peak employment in Clark County would be 18,800 jobs in 1986, about 7.4 percent of the baseline projection. This is a reduction of about 6,000 jobs compared to peak employment with the Proposed Action. Over the long run, 8,300 M-X-related jobs are forecast for the county, a decline of about 2,300 from levels projected for the Proposed Action. Long-run growth stimulus still would be experienced, but only short run impacts would be of sufficient magnitude to stress the county economy.

Employment impacts in Beaver County under Alternative 4 would be very similar to effects under Alternative 3. DDA construction and spillover effects from the base located at nearby Beryl would bring rapid growth and the benefits and costs associated with it. Employment would decline after 1986, but some long-term employment gain still are likely.

ALTERNATIVE 5 (4.3.2.1.7)

Under Alternative 5, the first OB would be located at Milford, Beaver County, and the second OB near Ely, White Pine County. Since the timing and magnitude of employment and other project materials requirements remain virtually unchanged from the Proposed Action, peak and long-term impacts for the Nevada/Utah region as a whole are expected to be about the same as with the Proposed Action. DDA counties would be largely unaffected by the shift of base locations, and employment effects on Eureka, Lincoln, Nye, and Juab counties would be the same as for the Proposed Action.

Peak employment in Beaver County is projected to equal 13,600 jobs (by place of residence) in 1986, more than six times trend-growth projected employment in that year. This level is about 4,800 jobs above that forecast under the Proposed Action with the smaller OB located at Milford. Over the long run, the M-X induced change in employment would equal 7,600 jobs with additional M-X employees residing in adjacent counties. This represents more than a 300 percent increase above baseline employment projected for that period, and is about 1,800 jobs above long-run forecasts of M-X-related employment under the Proposed Action. Historically, the county has grown very slowly, with only a 0.6 percent annual employment growth rate recorded for the 1967-1977 period. The county as a whole would experience severe boom-type growth given the projected rapid build up of employment from M-X. This growth would start earlier and be even more rapid than with the Proposed Action.

Milford and Beaver are the largest communities in Beaver County. Both would experience skilled labor shortages, general wage inflation, increased land values, and a large in-migration of project workers. This in-migration initially would consist of construction workers, while over the long run, much of the employment growth would consist of military personnel. Significant employment growth spillovers from OB operations also would be likely for Cedar City, Iron County.

White Pine County would exhibit a growth pattern comparable to Beaver County, but employment totals would be slightly less. Employment impacts on White Pine County would be identical to those associated with Alternative 3.

ALTERNATIVE 6 (4.3.2.1.8)

Under Alternative 6, the larger OB would be located at Milford, Beaver County, and the OB at Coyote Spring, in Clark County. Since the timing and magnitude of employment and project materials requirements remain virtually unchanged from their levels under the Proposed Action, peak and long-term impacts for the Nevada/Utah region as a whole would be nearly the same as for the Proposed Action. DDA counties would be largely unaffected by the shift of OB locations, so impacts on Eureka, Lincoln, Nye, White Pine, and Juab counties would be the same as those of the Proposed Action.

In Beaver County, the location of the Milford OB Alternative 6 impacts would be the same as those of Alternative 5. Coyote Spring OB impacts in Clark County would be similar to those described under Alternative 4.

ALTERNATIVE 7 (4.3.2.1.9)

This alternative locates the OBs and DDA in eastern New Mexico and northwestern Texas. The ROI includes the following counties (see Figure 4.3.2.1-3):

- o Texas: Bailey, Castro, Cochran, Dallam, Deaf Smith, Hale, Hartley, Hockley, Lamb, Lubbock, Moore, Oldham, Parmer, Potter, Randall, Sherman, and Swisher
- o New Mexico: Chaves, Curry, De Baca, Harding, Quay, Roosevelt, and Union

The direct employment effects for construction and assembly and checkout personnel employed on the project would originate at construction camps throughout the ROI. The larger operating base near Clovis, Curry County, New Mexico, would induce direct impacts in this county, with significant spillovers of economic activity to Portales in Roosevelt County, and Roswell in Chaves County. The smaller operating base located southwest of Dalhart in Hartley County would directly impact this county as well as nearby Dallam and Moore counties and the Amarillo metropolitan area. Amarillo and Lubbock are major metropolitan areas within the ROI, and would experience measurable growth in employment as a result of M-X deployment.

At the peak of project activity during 1986-1988, the employment effects of the M-X system would be dispersed widely over the ROI. In many counties, however, these impacts are expected to be small relative to baseline conditions without the project. Of the 24 counties within the ROI, the following are projected to experience employment growth of less than 5 percent of baseline employment during project construction and operations phases:

- o Texas: Castro, Cochran, Hale, Hockley, Lamb, Oldham, Sherman, and Swisher
- o New Mexico: Union

Human Environment

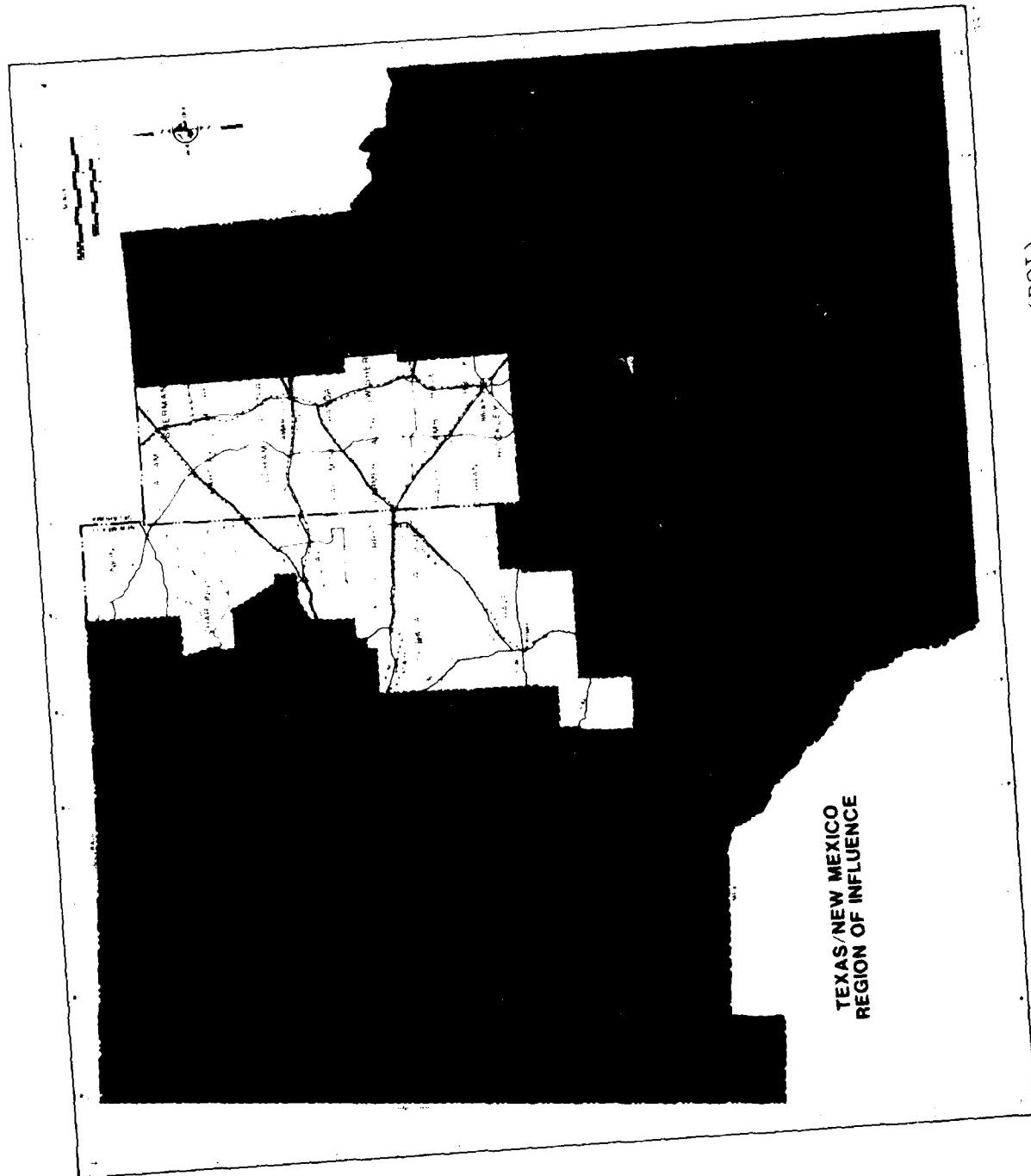


Figure 4.3.2.1-3. Texas/New Mexico region of influence (ROI).

Employment and Labor Force--Alternative 7

A number of counties proposed as DDA locations, although likely to experience significant boom-type employment stimulus during construction, would not experience long-run growth. These include Bailey, Deaf Smith, Parmer, Chaves, Harding, and Quay counties. Of this set, only Chaves County is forecast to have a baseline employment level above 10,000 jobs by 1990. The remaining counties, smaller in size, would have little preexisting economic base to support the rapid M-X-related growth. Boom-bust conditions could create significant economic dislocation in these counties. Table 4.3.2.1-2 summarizes the total employment change for each county.

Peak M-X related employment for the Texas/New Mexico region as a whole is projected at 53,000 jobs in 1988 (based on population projections by the Texas State Water Board and the University of New Mexico's Bureau of Business and Economic Research). This figure is about 17 percent of projected baseline employment of 321,000 jobs in that year. In a region projected to exhibit baseline employment growth of 1 percent annually, M-X impacts at the regional level represent a sizable perturbation. Unemployment rates would decline, some labor skills (e.g., construction trades) would be in very short supply and some wage escalation would be expected, particularly in peak employment years. Adjustment problems would be exacerbated by the region's historic orientation toward agriculture, making it less able to accommodate direct personnel consumption demands and local military procurement needs. Long-run employment impacts for the ROI would stabilize after 1990 at about 18,100 jobs, roughly 5 percent of the region's baseline employment forecast. Although a number of non-M-X projects are possible in the region over the same time period, none are considered large enough to significantly alter the employment impacts of M-X.

Much of this M-X-related growth would be concentrated in Curry County, New Mexico, where the larger OB would be located. M-X employment is forecast to peak at 14,900 jobs in 1988, which would double the county's projected baseline employment. Following a rapid build-up during construction and assembly and checkout, M-X-related employment is forecast to decline and stabilize at 8,900 jobs after 1990. This long-run level is 60 percent of long-run forecast baseline employment. Curry County is projected by the University of New Mexico, Bureau of Business and Economic Research, to be a "no-growth" county through 1995. Growth induced by M-X would radically change this forecast. Because Cannon Air Force Base already is located in the county, however, much of the infrastructure needed to serve a major defensive installation already is in place. M-X-related growth would expand this existing service and trade structure. The city of Clovis would be the focus of much of this growth, though additional employment growth would be exported to the nearby city of Portales, in Roosevelt County.

Dallam and Hartley counties would share in the economic expansion caused by locating the smaller operating base near Dalhart. Peak employment (by place of residence) in Dallam County is forecast to equal 6,600 jobs in 1988, an increase of nearly 300 percent of the baseline employment forecast. In Hartley County, peak employment (by place of residence) in 1988 of 7,300 jobs would be more than five times projected baseline employment. In both cases, boom growth conditions would result: labor shortages, wage-price inflation and very large in-migration of additional workers into the counties would be expected. Rapid expansion of the service and trade sectors in a currently agriculture-based economy also would result. Long-run employment impacts would be smaller with 850 additional jobs created over the

Table 4.3.2.1-2. (page 1 of 3)

TEXAS/NEW MEXICO		
TOTAL EMPLOYMENT CHANGE (BY PLACE OF RESIDENCE)		
DEPLOYMENT REGION		
ALTER-NATIVE	PEAK YEAR	LONG TERM
M-X INDUCED CHANGE (% above normal growth baseline)		
7	53,034 (16.5)	18,133 (5.3)
8	29,440 (-9.2)	10,147 (3.0)
BAILEY COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
M-X INDUCED CHANGE (% above normal growth baseline)		
7	1,590 (45.9)	0 (0)
8	249 (-7.1)	0 (0)
CASTRO COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
M-X INDUCED CHANGE (% above normal growth baseline)		
7	204 (7.1)	0 (0)
8	131 (3.1)	0 (0)
COCHRAN COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
M-X INDUCED CHANGE (% above normal growth baseline)		
7	72 (3.4)	0 (0)
8	65 (3.1)	0 (0)
DALE COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
M-X INDUCED CHANGE (% above normal growth baseline)		
7	6,569 (274.4)	848 (33.1)
8	1,535 (-64.2)	0 (0)
DEAF SMITH, COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
M-X INDUCED CHANGE (% above normal growth baseline)		
7	2,865 (33.4)	0 (0)
8	1,700 (20.3)	0 (0)
HALE COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
M-X INDUCED CHANGE (% above normal growth baseline)		
7	667 (4.0)	0 (0)
8	182	0 (0)
HARTLEY COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
M-X INDUCED CHANGE (% above normal growth baseline)		
7	7,336 (560.4)	4,837 (337.1)
8	1,670 (177.6)	0 (0)

3740

Table 4.3.2.1-2. (page 2 of 3)

TEXAS/NEW MEXICO

TOTAL EMPLOYMENT CHANGE (BY PLACE OF RESIDENCE)

HOCKLEY COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
7	325 (3.5)	0 (0)
8	113 (1.2)	0 (0)

LAMB COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
7	149. (2.1)	0 (0)
8	130 (1.8)	0 (0)

LUBBOCK COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
7	3,417 (3.2)	510 (0.4)
8	2,197 (2.0)	475 (0.4)

MOORE COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
7	1,868 (77.2)	850 (12.1)
8	197 (2.9)	0 (0)

OLDHAM COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
7	68 (7.5)	0 (0)
8	39 (3.4)	0 (0)

PARMER COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
7	1,855 (43.9)	0 (0)
8	27 (0.6)	0 (0)

POTTER/RANDALL COUNTIES, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
7	9,113 (10.2)	1,638 (1.7)
8	2,479 (2.8)	353 (0.4)

SHERMAN COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
7	337 (22.2)	0 (0)
8	4	0 (0)

Table 4.3.2.1-2. (page 3 of 3)

TEXAS/NEW MEXICO					
TOTAL EMPLOYMENT CHANGE (BY PLACE OF RESIDENCE)					
SWISHER COUNTY, TX.		CHAVES COUNTY, NM.			
ALTER-NATIVE	PEAK YEAR M-X INDUCED CHANGE (% above normal growth baseline)	LONG TERM	ALTER-NATIVE PEAK YEAR M-X INDUCED CHANGE (% above normal growth baseline)		
7	73 (-1.6)	0 (0)	7	4,008 (19.3)	144 (0.6)
8	42 (0.9)	0 (0)	8	2,889 (13.5)	142 (0.6)
CURRY COUNTY, NM.		DE BACA COUNTY, NM.			
ALTER-NATIVE	PEAK YEAR M-X INDUCED CHANGE (% above normal growth baseline)	LONG TERM	ALTER-NATIVE PEAK YEAR M-X INDUCED CHANGE (% above normal growth baseline)		
7	14,881 (101.1)	8,886 (60.5)	7	57 (5.8)	0 (0)
8	13,548 (-32.0)	8,764 (59.7)	8	58 (6.0)	0 (0)
HARDING COUNTY, NM.		QUAY COUNTY, NM.			
ALTER-NATIVE	PEAK YEAR M-X INDUCED CHANGE (% above normal growth baseline)	LONG TERM	ALTER-NATIVE PEAK YEAR M-X INDUCED CHANGE (% above normal growth baseline)		
7	2,736 (577.2)	0 (0)	7	3,001 (62.2)	0 (0)
8	2,376 (543.5)	0 (0)	8	2,466 (51.3)	0 (0)
ROOSEVELT COUNTY, NM.		UNION COUNTY, NM.			
ALTER-NATIVE	PEAK YEAR M-X INDUCED CHANGE (% above normal growth baseline)	LONG TERM	ALTER-NATIVE PEAK YEAR M-X INDUCED CHANGE (% above normal growth baseline)		
7	3,530 (53.3)	420 (6.2)	7	91 (4.3)	0 (0)
8	2,095 (45.4)	413 (6.1)	8	7 (0.3)	0 (0)

Employment and Labor Force--Alternative 8

long term in Dallam County, and 4,800 M-X-related jobs required in Hartley County. In the latter case, this figure would represent more than a tripling of long-term projected baseline employment in the county.

Lubbock, Moore, Potter, Randall and Roosevelt counties are all forecast to receive large amounts of employment growth from M-X deployment. Lubbock County, with a very large existing economic base, would likely be able to assimilate peak employment of 3,400 jobs, which represent only 3 percent of its baseline employment level of 107,185 jobs in 1987. Impacts in Potter and Randall counties are somewhat larger: peak employment of 9,100 jobs in Amarillo in 1987 would be 10 percent of the baseline forecast. Long run impacts would be about 2 percent of the forecast baseline.

However, Roosevelt and Moore counties have much smaller economies. Peak M-X-related employment impacts of 3,500 jobs in Roosevelt County in 1988 would represent 50 percent of baseline employment. An additional 1,900 M-X-related jobs in Moore County would be 27 percent of its baseline for 1988. Neither county could accommodate such rapid large-scale employment growth without some labor shortages, inflation, and other boom-type stress. Long-run growth impacts would be much smaller, but still would induce further industrial change and growth.

ALTERNATIVE 8 (4.3.2.1.10)

Under split deployment, an OB would be located at Coyote Spring Valley in Clark County, Nevada, and 100 missiles in the Nevada/Utah ROI. The second OB would be located near Clovis, in Curry County, New Mexico, and 100 missiles would be deployed in the Texas/New Mexico ROI. Compared to full deployment, this alternative would result in minimal employment impacts in some counties, and effects at the ROI level would reduced in magnitude by half for both basing regions (Tables 4.3.2.1-1 and 4.3.2.1-2).

For the Nevada/Utah region as a whole, employment peaks at 33,600 jobs in 1986, roughly 5 percent of the projected baseline employment level. This peak employment is about 56 percent of that created in the ROI under the Proposed Action. Over the long run, 10,300 jobs would be created, just over 1 percent of the region's 1,992 total baseline employment of 836,000. This figure compares with 18,400 long-run jobs created under the Proposed Action.

With fewer DDA facilities and only one operating base in Nevada/Utah, Eureka, White Pine, Juab and Washington counties are forecast to receive negligible employment impacts under this alternative. Lincoln, Nye, Beaver, Iron, and Millard counties would experience short run boom-bust impacts from construction and assembly and checkout of the DDA. The operating base located at Coyote Spring would have its greatest direct and induced employment effects in Clark County, though significant long-run spillover employment is likely in Lincoln County. As local suppliers attempt to meet project requirements and demands created by construction employees, employment also would be created in the Salt Lake City - Provo metropolitan area (Salt Lake and Utah counties).

Well over half of peak-year jobs and most long-run M-X-related employment would be generated in Clark County. At the peak, M-X employment impacts on Clark County, would represent an increase of 8 percent above the baseline of

Employment and Labor Force--Alternative 8

249,000 jobs in 1986. Peak employment would be roughly 80 percent of that forecast for the county under the Proposed Action, the result of less indirect employment associated with DDA construction and base procurement. Over the long run, the net increase in employment would be just over 10,000 jobs, virtually the same as that forecast for the Proposed Action.

For the Texas/New Mexico region as a whole, peak M-X-related employment is projected at 29,400 jobs in 1987, an increase of 9 percent over projected baseline employment levels. As in Nevada/Utah, the employment effects of the split deployment option are about 56 percent of full deployment impacts. Over the long run, regional employment growth stabilizes at 10,100 jobs in 1992 and after, and represents an increase of 3 percent over baseline forecasts. This figure is roughly half that projected for the ROI under full deployment. Only Curry County would receive dramatic employment stimulus over the entire life of the project. This results from construction and operation of the second operating base. Over the long run, the only additional counties forecast to benefit from M-X employment are those with relatively well developed metropolitan areas and economies sufficiently large to supply local procurement and accommodate direct employee consumption demands. These counties include Lubbock, Potter/Randall, Chaves, and Roosevelt. They are also projected to experience most of the employment over the short run.

Most long run M-X-related employment growth would be concentrated in Curry County, 8,800 jobs, or 60 percent of long-term county projected baseline employment. This figure is about the same as that for full deployment. In the short run, boom-town growth would result; Curry County's peak M-X-related employment of 13,550 jobs would be 92 percent of the baseline projection. This also is virtually the same as that forecast for full deployment in Texas/New Mexico, and this rapid growth would have the same significant consequences for the local economy as full deployment.

Many counties in the Texas/New Mexico ROI would experience only minimal impacts under split deployment because about half of the system's DDA and base facilities would be located outside the region.

Earnings



EARNINGS

INTRODUCTION (4.3.2.2.1)

Direct project construction and operations employment, as well as induced secondary employment growth, will generate large increases in deployment area incomes. Peak earnings, attributable to M-X in Nevada/Utah for example, could reach as high as \$1,180 million per year, and even in a relatively large, well-developed regional economy, earnings growth of this magnitude could trigger some wage-price inflation. Boom growth is likely in towns adjacent to operating bases and, at least over a short run period of time, in communities throughout the designated deployment area. Some project employees, construction trades in particular, are expected to have much higher gross incomes than the average for the area, tending to pull up overall earning, and induce cross-occupational movement. Traditional agriculture-related industries would tend to lose employment.

To a large extent, changes in earnings, as a result of the project, reflect an increase in the size of the economy of the deployment region. Since many of the workers employed by the M-X system would receive higher pay than the average for the region, earnings per worker would increase due to the project.

Both effects--aggregate earnings and earnings-per-worker--would tend to increase prices in the region because of stronger demand. Price increases would most likely be for land and housing, particularly in the communities adjacent to the operating base. Temporary increases in land values and housing prices are likely in communities affected by DDA construction and assembly checkout. Such increases would tend to benefit persons owning property when the project begins. Renters would be adversely affected by the changes in property values.

General commodity inflation at the local level is not likely to occur as a result of M-X deployment. Many goods can easily be transported into the area from regional trade centers. Any shortages which might take place would be of brief duration, and would not trigger significant price changes.

Earnings impacts are closely related to employment effects. Direct worker earnings are calculated from project labor requirements and a set of earnings per worker assumptions. Indirect worker earnings use earnings assumptions applied to employment calculated through county level interindustry-type models and estimates of employment created from project-related investments.

PROPOSED ACTION (4.3.2.2.2)

The earnings impacts of the Proposed Action will be closely related to its employment effects, discussed in Section 4.3.3.1.1. Peak M-X-related earnings for Nevada/Utah are forecast to equal \$1,180 million in (fiscal year 1980 dollars) 1986, then decline and level off to \$250 million by 1993. By comparison, these figures are about 7 percent and one percent of 1978 total earnings of \$17.7 billion (1980 dollars) for the ROI. Historically, both states have exhibited rapid real earnings growth, 5.3 percent per year in Nevada and 4.2 percent per year in Utah over the 1967-1977 period. But gains have been concentrated in the metropolitan areas of Las Vegas and Salt Lake City - Provo, while in the balance of the ROI counties, total earnings have grown very slowly. This is important because a large infusion of additional income in non-growing areas is likely to trigger localized wage and price inflation. In addition, project employees - some construction trades, in particular - are expected to have higher gross incomes than the average for this area, tending to pull up earnings across other occupations. Earnings projections by county are presented in Table 4.3.2.2-1.

On a county basis, earnings growth in Clark County would comprise almost one-third of ROI peak earnings. Peak M-X-related earnings in the county would equal about 11 percent of 1978 earnings of \$3.37 billion (1980 dollars) but only 4 percent of this figure over the long run. This county has been characterized by very rapid growth in earnings, 6.3 percent in real dollars over the 1967-1977 period, but most growth has centered in the services industry. Adjustment to earnings growth of the magnitude projected under M-X would not produce significant stress, but would generate some wage and price inflation, particularly in the short run and in key occupations. Although the county had a per capita income of \$8,990 in 1978, the highest in either of the two states, relatively high construction wage rates would increase it further.

M-X-related earnings in Beaver County, the site of the second OB as well as DDA facilities, would peak at \$170 million in 1987, then stabilize at \$85 million by 1992. Compared to 1978 earnings of \$21 million (1980 dollars), earnings growth in the county would be extremely large. Further, these impacts would occur in a county characterized by very slow historic earnings growth in real earnings, 0.5 percent per year over the 1967-1977 period, and in one with a 1978 per capita income of \$5,590, low even for a state characterized by agriculturally-based economies. Very significant growth problems in the county are likely with such a large infusion of additional incomes over a short period of time. Significant increases in local land values and earnings in non-M-X sectors are likely, as are temporary shortages of some goods, services, and skilled construction labor.

Salt Lake and Utah counties would experience a large absolute increase in earnings. In the short run, M-X induced earnings would peak at \$125 million, but this represents only about 2 percent of total 1978 earnings of \$5,368.1 million (1980 dollars). Further, these counties comprise the economic hub of Utah and have led earnings growth in the state. Salt Lake/Utah counties would likely be the only areas which could accommodate M-X without significant stress.

Other counties in the ROI receive earnings growth principally from DDA construction, and consequently experience short-run impacts. Some effects, however, would be very large. Nye County's M-X-related earnings would peak at \$230 million in 1988, about 165 percent above 1978 earnings of \$140 million (1980 dollars) in the

Table 4.3.2.2-1. (page 1 of 3)

NEVADA/UTAH TOTAL EARNINGS CHANGE		
(in millions of FY 80 dollars)		
DEPLOYMENT REGION		
ALTER- NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE	
PROP. ACTION	1188.9	247.8
1	1180.3	247.8
2	1177.8	247.4
3	1159.2	242.7
4	1174.3	246.9
5	1157.7	242.7
6	1173.2	246.9
8 A	654.3	140.4
ALTER- NATIVE	M-X PLUS OTHER PROJECTS	
PROP. ACTION	1188.9	247.8
1	1180.3	247.8
2	1177.8	247.4
3	1159.2	242.7
4	1174.3	246.9
5	1157.7	242.7
6	1173.2	246.9
8 A	654.3	140.4
EUREKA COUNTY, NV.		
ALTER- NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE	
PROP. ACTION	111.1	
1	111.1	
2	111.1	
3	111.1	
4	111.1	
5	111.1	
6	111.1	
8 A	0	0
ALTER- NATIVE	M-X PLUS OTHER PROJECTS	
PROP. ACTION	111.1	
1	111.1	
2	111.1	
3	111.1	
4	111.1	
5	111.1	
6	111.1	
8	0	0
CLARK COUNTY, NV.		
ALTER- NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE	
PROP. ACTION	359.7	145.5
1	359.6	145.9
2	357.6	140.9
3	87.8	8.5
4	277.1	113.2
5	87.7	8.0
6	272.7	112.7
8 A	281.6	138.8
ALTER- NATIVE	M-X PLUS OTHER PROJECTS	
PROP. ACTION	359.7	145.5
1	359.6	145.9
2	357.6	140.9
3	87.8	8.5
4	277.1	113.2
5	87.7	8.0
6	272.7	112.7
8	281.6	138.8
LINCOLN COUNTY, NV.		
ALTER- NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE	
PROP. ACTION	81.0	2.1
1	81.3	2.6
2	80.4	1.2
3	81.6	2.2
4	82.0	2.7
5	80.5	1.5
6	80.9	2.0
8 A	65.6	1.2
ALTER- NATIVE	M-X PLUS OTHER PROJECTS	
PROP. ACTION	81.1	2.1
1	81.3	2.6
2	80.4	1.2
3	81.6	2.2
4	82.0	2.7
5	80.5	1.5
6	80.9	2.0
8	65.6	1.2

3760

Table 4.3.2.2-1. (page 2 of 3)

NEVADA/UTAH TOTAL EARNINGS CHANGE		
NYE COUNTY, NV.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE	
PROP. ACTION	229.9	
1	229.9	
2	229.9	
3	230.1	0.3
4	229.9	
5	230.1	0.3
6	229.9	
8A	121.9	
ALTER-NATIVE	M-X PLUS OTHER PROJECTS	
PROP. ACTION	229.9	
1	229.9	
2	219.9	
3	230.1	0.2
4	229.9	
5	230.1	0.3
6	229.9	
8	121.9	

WHITE PINE COUNTY, NV.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE	
PROP. ACTION	114.8	
1	114.8	
2	114.8	
3	216.5	99.1
4	114.8	
5	716.5	97.1
6	114.8	
8A	1.9	
ALTER-NATIVE	M-X PLUS OTHER PROJECTS	
PROP. ACTION	114.8	
1	114.8	
2	114.8	
3	216.5	99.1
4	114.8	
5	716.5	97.1
6	114.8	
8	1.9	

BEAVER COUNTY, UT.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE	
PROP. ACTION	168.4	86.8
1	67.9	3.1
2	67.9	
3	72.6	4.5
4	73.0	4.5
5	291.1	114.7
6	291.1	114.7
8A	77.7	0
ALTER-NATIVE	M-X PLUS OTHER PROJECTS	
PROP. ACTION	168.4	86.8
1	67.9	3.1
2	67.9	
3	72.6	4.5
4	72.6	4.5
5	291.1	114.7
6	291.1	114.7
8	77.7	0

IRON COUNTY, UT.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE	
PROP. ACTION	9.3	4.7
1	154.1	87.1
2	4.4	2.3
3	730.4	115.1
4	230.4	115.1
5	13.4	6.2
6	13.4	6.2
8A	3.9	0
ALTER-NATIVE	M-X PLUS OTHER PROJECTS	
PROP. ACTION	9.3	4.7
1	154.1	87.1
2	4.4	2.3
3	730.4	115.1
4	230.4	115.1
5	13.4	6.2
6	13.4	6.2
8	3.9	0

Table 4.3.2.2-1. (page 3 of 3)

NEVADA/UTAH TOTAL EARNINGS CHANGE		
JUAB COUNTY, UT.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE	
PROP. ACTION	113.0	
1	113.0	
2	114.3	
3	115.0	
4	113.0	
5	113.0	
6	113.0	
8A	0.4	
ALTER-NATIVE	M-X PLUS OTHER PROJECTS	
PROP. ACTION	113.0	
1	113.0	
2	114.3	
3	115.0	
4	114.0	
5	113.0	
6	113.0	
8	0.4	
UTAH/SALT LAKE COUNTY, UT.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE	
PROP. ACTION	124.6	5.7
1	123.7	4.7
2	125.8	9.5
3	121.0	10.1
4	124.4	6.2
5	122.5	11.4
6	127.9	7.5
8 A	51.5	0
ALTER-NATIVE	M-X PLUS OTHER PROJECTS	
PROP. ACTION	124.4	
1	123.7	4.7
2	125.8	9.5
3	121.1	10.1
4	124.4	6.2
5	122.5	11.4
6	127.9	7.5
8 A	51.5	0
WASHINGTON COUNTY, UT.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE	
PROP. ACTION	5.5	
1	7.0	4.6
2	2.4	3.4
3	10.0	5.5
4	10.1	5.8
5	7.3	3.5
6	7.4	3.6
8A	1.6	0.4
ALTER-NATIVE	M-X PLUS OTHER PROJECTS	
PROP. ACTION	5.5	
1	7.0	4.6
2	2.4	3.4
3	10.0	5.5
4	10.1	5.8
5	7.3	3.5
6	7.4	3.6
8	1.6	0.4

Earnings--Alternatives I, 2

county. White Pine County would be similar: 1986 peak earnings of \$115 million represent more than 200 percent of 1978 earnings of \$55 million (1980 dollars).

Peak earnings in Eureka County are forecast to reach \$111 million in 1988, almost 10 times 1978 earnings of \$12 million (1980 dollars). In these counties, earnings of this magnitude could not be accommodated without boom-type wage and price inflation. Effects in other counties would be similar, but lower in magnitude. The extent of this demand-pull stimulus would be somewhat mitigated by workers' tendencies to spend a significant fraction of their incomes in Salt Lake City and Las Vegas. It also would be reduced by expanding local availability of goods and services on a temporary basis by transporting them into the affected communities.

Other mitigation strategies would be similar to those proposed for reducing employment impacts, discussed in Employment and Labor Forces.

ALTERNATIVE 1 (4.3.2.2.3)

Alternative 1 differs from the Proposed Action in that the second operating base would be located at Beryl, in Iron County. Since all else remains virtually the same, the only significant alterations in earnings across the ROI occur with the reduced Beaver County replaced by a large increase in earnings in Iron County.

In Beaver County, M-X related earnings peak at \$69 million in 1986, roughly \$100 million less than under the Proposed Action, but still over 300 percent of 1978 baseline earnings of \$21 million (1980 dollars) in the county. Over the long run, M-X related earnings are forecast to equal \$3 million, only 3 percent of a comparable long run earnings figure under the Proposed Action. Although Alternative 1 would greatly reduce earnings impacts in the county, inflationary pressures are still very likely, given the rural, slow-growing nature of the county's economy.

Jobs in Iron County are forecast to generate peak earnings of \$158 million in 1987, almost 200 percent of 1978 total earnings of \$81 million (1980 dollars) for the county. This net increase is 17 times peak M-X-related earnings in Iron County under the Proposed Action. M-X-related earnings stabilize at \$87 million, more than 100 percent of 1978 earnings. Much of this growth is expected to occur in Cedar City, though Beryl also is likely to expand sharply as a result of M-X. Boom-type growth is likely with attendant wage and price inflation, particularly during the construction phase. The county has historically been rural, with relatively small commercial and industrial sectors, though it has grown moderately in the recent past. With a 1978 per capita income of \$5,260, much lower than the state or nation, rapid influx of high paid construction workers would create significant change in the size and structure of the county's economy.

ALTERNATIVE 2 (4.3.2.2.4)

Alternative 2 differs from the Proposed Action in that the second operating base would be located in the vicinity of Delta, in Millard County. The only significant changes in earnings across the ROI are much smaller increases in Beaver County earnings, but a sharply higher earnings increase in Millard County. Impacts in Beaver County under this alternative are identical to those discussed for Alternative 1 and, will not be detailed here.

Earnings--Alternative 3

Jobs in Millard County are forecast to generate peak earnings of \$274 million in (fiscal year 1980 dollars) 1988, almost 700 percent of 1978 total earnings of \$39 million (1980 dollars). The net increase under this alternative is about 240 percent of those peak earnings forecast for the Proposed Action. As employment declines to operational levels and the mix of occupations shifts from construction to primarily military and civilian base employees, project related earnings would decline to \$94 million in 1991, a figure still more than twice 1978 baseline earnings. Thus, in an economy characterized by heavy dependence on agriculture and government and very little earnings growth (1.9 percent per year over the 1967-1977 period), earnings growth of the magnitude induced by M-X would create significant boom-type growth stress.

ALTERNATIVE 3 (4.3.2.2.5)

Alternative 3 differs from the Proposed Action in its operating base locations. The first operating base is located in the vicinity of Beryl, in Iron County, and the second operating base, in the vicinity of Ely, in White Pine County. Significant changes in earnings levels from those described under the Proposed Action would occur in Clark and Beaver Counties, where earnings levels would fall off dramatically; and in Iron and White Pine counties, where M-X-related earnings would significantly increase.

Peak year earnings in Clark County would be reduced by a factor of about 4, to \$88 million as compared to those projected under the Proposed Action. This 1986 peak figure would represent only about 3 percent of 1978 county total earnings of \$3.37 billion (1980 dollars). In the long run, the change in earnings from the Proposed Action is more dramatic. Under Alternative 3, long run earnings of \$8.5 million would represent a reduction by a factor of 17, and would be less than one percent of 1978 earnings. Little perturbation of the county's economy would be likely under this alternative. Effects on Beaver County are similar to those outlined for Alternative 1, and will not be repeated here.

Jobs in Iron County under this alternative would induce very significant growth in county total earnings. Peak M-X related earnings are forecast to equal \$230 million, almost 25 times those forecast in the peak year under the Proposed Action. Peak earnings of this magnitude would be about 3 times 1978 county earnings of \$81 million (1980 dollars). The county would be severely stressed and significantly change with such a large, rapid infusion of earnings. Long-run earnings are projected to equal \$115 million, about \$110 million more than under the Proposed Action. Significant change in the size and structure of the local economy would be likely as it adjusted to earnings and expenditures resulting from this alternative.

White Pine County peak earnings would rise by more than \$100 million under this alternative. The peak is forecast to equal \$219 million, and would represent a net increase of about 400 percent over the county's 1978 total earnings of \$55 million (1980 dollars). Long-run base operations - and, to a lesser extent, indirect employment - would stabilize earnings at \$97 million by 1993. This figure is about 175 percent of 1978 total earnings. White Pine County has recently exhibited little earnings growth; real total earnings grew by 1.9 percent per year over the 1967-1977 period, well below state and national averages. Furthering its likely adjustment problems, the county has been dominated by mining and government sectors, without the diverse commercial sector needed readily to supply consumption demands of

project workers. Rapid upward adjustment of wages and prices would be probable from the rapid infusion of high paid workers into the county, with a more stable long-term price level reached after the boom of base construction has passed.

ALTERNATIVE 4 (4.3.2.2.6)

Alternative 4 differs from the Proposed Action in that the first operating base would be located in the vicinity of Beryl, in Iron County, and the second operating base would be sited in Coyote Spring Valley, in Clark County. Significant change, in earnings levels from those described under the Proposed Action would include a reduction in earnings projected for Clark and Beaver counties and a very large increase in those projected for Iron County.

Sharp reductions in projected M-X related earnings in Beaver County under this alternative are very similar to those discussed under Alternative 1 in Section 4.3.3.2.3, and will not be discussed here. In Clark County, earnings would not decline so dramatically. In the peak year, M-X-related earnings would reach \$273 million, about \$86 million less than under the Proposed Action, but still 8 percent of 1978 county earnings. After the construction build-up, earnings would decline, then stabilize in 1992 at \$113 million, roughly \$32 million less than long run M-X related earnings under the Proposed Action. Long run earnings would represent a net increase of about 3 percent over 1978 total earnings of \$3.37 billion (1980 dollars) in Clark County. Even a county with a very large and well developed economy would experience some rapid earnings growth and wage inflation in key sectors as well as price inflation for some materials and final consumer goods.

Growth in earnings in Iron County would be very significant under this alternative, particularly in the short run during DDA and operating base construction. Detailed analyses have been presented for Alternative 3 impacts under Alternative 4 would be identical.

ALTERNATIVE 5 (4.3.2.2.7)

Alternative 5 differs from the Proposed Action in that the first operating base would be located in the vicinity of Milford, in Beaver County, and the second operating base in the vicinity of Ely, in White Pine County. Significant change in earnings levels from those described under the Proposed Action would include a very large reduction in earnings projected for Clark County and increases in earnings for Beaver and White Pine counties.

Reduction in M-X related earnings in Clark County under this alternative are virtually identical to those described under Alternative 3. The same is true for the projected increase in White Pine County earnings relative to those described for the Proposed Action.

Beaver County earnings peak at \$291 million in 1986, a phenomenal increase over 1978 baseline earnings of \$21 million (1980 dollars). This alternative represents a net increase of \$122 million in earnings compared to those projected under the Proposed Action, and results from the larger construction requirements of a first operating base. Long run operational requirements and induced employment growth under Alternative 5 suggest a net increase in earnings equal to \$115 million, about \$28 million more than under the Proposed Action. Impacts discussed for Beaver

County in the Proposed Action section would apply for this alternative as well, but would be of a larger magnitude, particularly over the construction phase.

ALTERNATIVE 6 (4.3.2.2.8)

Alternative 6 differs from the Proposed Action in that operating base locations have been switched; the first operating base would be located in the vicinity of Milford, in Beaver County, and the second, in Coyote Spring Valley, in Clark County. Effects of both these have been previously analyzed, and will not be repeated here. The impact of a first operating base in the vicinity of Milford has been analyzed under Alternative 5. The effect of deploying a second operating base in Clark County has been treated under Alternative 4.

ALTERNATIVE 7 (4.3.2.2.9)

Earnings impacts from this alternative are closely related to employment effects, discussed under the Employment and Labor Forces section. Full deployment in Texas-New Mexico is projected to generate a net increase in earnings of as much as \$1.1 billion in (fiscal year 1980 dollars) 1987, then as project build-up is completed, earnings would decline and stabilize at \$246 million by 1993. At the peak, M-X related earnings would represent growth equal to about 26 percent of the region's 1978 total earnings of \$4.3 billion (1980 dollars). Over the long run, the net increase in earnings would be about 6 percent of 1978 levels. As noted in the employment analysis, the Texas/New Mexico ROI is basically rural, and historically has exhibited modest economic growth. Metropolitan concentrations include Amarillo in Potter/Randall counties, Lubbock in Lubbock County, Clovis in Curry County, Portales in Roosevelt County, and Roswell in Chaves County. All of these cities, except Roswell, would be the focus of both short- and long-run economic growth, supplying local procurement needs and meeting project worker demands. As analysis on M-X related employment has shown Roosevelt County would be most likely impacted, given its relatively small preexisting economic base. In addition, many counties where DDA facilities would be constructed will be significantly impacted in the short run. These include Bailey, Deaf Smith, Parmer, Chaves, Harding and Quay counties, and earnings forecasts indicate all face the potential of rapid price inflation and construction and final goods shortages. Earnings projections by county are presented in Table 4.3.2.2-2.

Curry County, proposed for location of DAA facilities and the first operating base, would experience the largest absolute gain in earnings. Peak earnings are forecast to equal \$255.3 million in 1986, slightly more than 1978 total county earning of \$254.8 million (1980 dollars). Following construction, earnings would decline and stabilize at \$121.7 million by 1992. Earnings growth of this magnitude would significantly alter the size and nature of the county's economy; rapid wage and price inflation, changes in the county's occupational mix, and local shortages of supplier and finished goods would be likely.

Dallam and Hartley counties would share in economic expansion induced by DDA and operating base construction. But over the long run, virtually all earnings growth would occur in Hartley County, a result of employment on the base. In the short run, the net increase in earnings would peak at \$182.3 million in Hartley in 1987, and at \$223.4 million in Dallam County in 1988. In both cases, growth over 1978 county total earnings would be great; in Hartley, peak earnings would be about

Table 4.3.2.2-2. (Page 1 of 3)

**TEXAS/NEW MEXICO
TOTAL EARNINGS CHANGE**

DEPLOYMENT REGION			BAILEY COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM	ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE			M-X INDUCED CHANGE	
7	1,395.7	246.3	7	75.0	0.0
8 B	598.5	137.9	8 B	3.2	0.0

CASTRO COUNTY, TX.			COCHRAN COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM	ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE			M-X INDUCED CHANGE	
7	2.7	0.0	7	0.9	0.0
8 B	1.7	0.0	8 B	0.8	0.0

DALLAM COUNTY, TX.			DEAF SMITH, COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM	ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE			M-X INDUCED CHANGE	
7	223.4	4.0	7	130.0	0.0
8 B	64.3	0.0	8 B	80.5	0.0

HALE COUNTY, TX.			HARTLEY COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM	ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE			M-X INDUCED CHANGE	
7	3.5	0.0	7	182.3	83.9
8	7.4	0.0	8 B	70.8	0.0

3766

Table 4.3.2.2-2. (Page 2 of 3)

**TEXAS/NEW MEXICO
TOTAL EARNINGS CHANGE**

HOCKLEY COUNTY, TX.			LAMB COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM	ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE			M-X INDUCED CHANGE	
7	1.8	0.0	7	1.9	0.0
8	1.5	0.0	8	1.7	0.0

LUBBOCK COUNTY, TX.			MOORE COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM	ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE			M-X INDUCED CHANGE	
7	37.5	6.6	7	13.0	5.9
8B	28.6	6.2	8B	0.4	0.0

OLDHAM COUNTY, TX.			PARMER COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM	ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE			M-X INDUCED CHANGE	
7	0.9	0.0	7	92.3	0.0
8	0.4	0.0	8B	0.4	0.0

POTTER/RANDALL COUNTIES, TX.			SHERMAN COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM	ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE			M-X INDUCED CHANGE	
7	121.3	17.0	7	4.4	0.0
8B	24.7	4.6	8B	0.9	0.0

Table 4.3.2.2-2. (Page 3 of 3)

**TEXAS/NEW MEXICO
TOTAL EARNINGS CHANGE**

SWISHER COUNTY, TX.		CHAVES COUNTY, NM.			
ALTER-NATIVE	PEAK YEAR	LONG TERM	ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE			M-X INDUCED CHANGE	
-	1.0	0.0	-	101.4	1.3
SP	1.0	0.0	BB	85.3	1.8

CURRY COUNTY, NM.		DE BACA COUNTY, NM.			
ALTER-NATIVE	PEAK YEAR	LONG TERM	ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE			M-X INDUCED CHANGE	
-	237.1	121.7	-	0.7	0.0
SP	237.1	119.9	BB	0.8	0.0

HARDING COUNTY, NM.		QUAY COUNTY, NM.			
ALTER-NATIVE	PEAK YEAR	LONG TERM	ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE			M-X INDUCED CHANGE	
-	151.7	0.0	-	89.8	0.0
SP	151.7	0.0	BB	75.1	0.0

ROOSEVELT COUNTY, NM.		UNION COUNTY, NM.			
ALTER-NATIVE	PEAK YEAR	LONG TERM	ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE			M-X INDUCED CHANGE	
-	36.9	5.5	-	1.2	0.0
SP	36.9	5.4	BB	0.1	0.0

2,000 percent of 1978 earnings of \$9.1 million (1980 dollars), while in Dallam, peak earnings would equal about 490 percent of 1978 earnings of \$45.6 million (1980 dollars). In agricultural economies, boom growth from earnings of this magnitude would result. Over the long run, earnings by place of work would decline in Dallam County to a projected level of \$4.0 million in 1993, about 9 percent of 1978 earnings. Hartley County, the operating base location, would experience long run annual earnings equal to \$83.9 million, over 9 times 1978 total earnings. Long run project-related employment in Hartley County would induce significant economic stress and could completely change the size and nature of the county's economic base toward trade and service industries.

ALTERNATIVE 8 (4.3.2.2.10)

Earnings impacts under the split deployment alternative will follow those for employment, discussed in Employment and Labor Forces. In both Nevada/Utah and Texas/New Mexico, short and long run earnings growth would be roughly one half those projected under full deployment in either region.

For the region as a whole, M-X related earnings peak in 1987 at \$658.3 million, about 4 percent of 1978 total earning of \$17,740.9 million (1980 dollars) in the ROI. Upon completion of DDA and base construction, earnings would decline rapidly, then stabilize at \$140.4 million in 1992. In both the short and long run, the M-X induced increase should be accommodated without significant growth stress.

The first operating base at Coyote Spring Valley will induce most earnings growth in the ROI. Peak earnings in Clark County are forecast to equal \$281.6 million, about 78 percent of peak earnings forecast for the county under the Proposed Action. Over the long run, the net growth in earnings is forecast to equal \$138.8 million, only \$7 million less than under the Proposed Action. Short run growth in earning would occur in Lincoln, Nye, Beaver, Iron, and Millard counties from DDA construction employment. In all cases, the increase in expected earnings would induce short run boom growth in these counties, significantly stressing all county-level economies and resident populations.

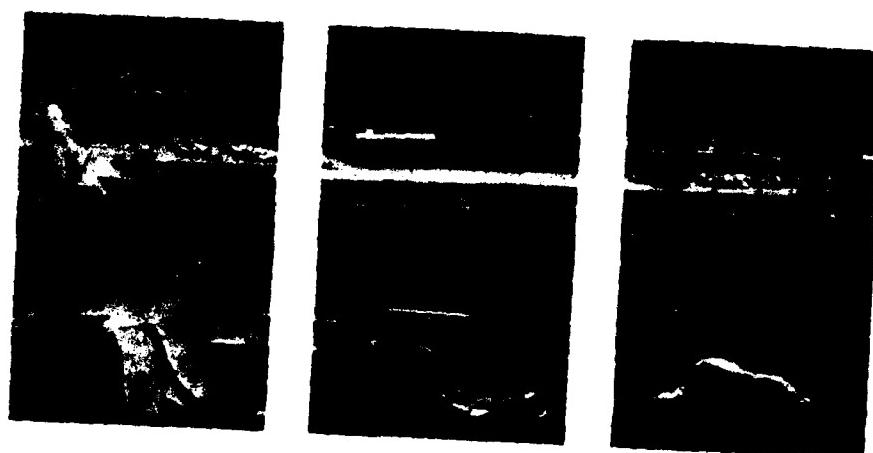
Forecasts indicate that Curry County will receive almost as much earnings stimulus as that detailed in Alternative 7, for Texas/New Mexico. The only additional counties expected to receive long run earnings growth are those with metropolitan areas, and they include Lubbock, Potter/Randall, and Roosevelt counties. These counties also experience significant earnings growth over the short run as well. Designated deployment area counties include Dallam, Deaf Smith, Hartley, Chaves, Harding and Quay. Only Chaves County has an economy of any size. This alternative would induce significant boom-type stress in these areas.

For the region as a whole, earnings are forecast to peak at \$598.5 million, roughly 14 percent of the region's 1978 total earnings of \$4,277.9 million (1980 dollars), and about one-half peak earnings projected under Alternative 7, full deployment in the ROI. Over the long run, M-X related earnings would stabilize at \$137.9 million by 1992, \$108.4 million less than long run earnings forecast under Alternative 7.

Curry County is forecast to receive virtually all long run earnings growth in the ROI. The long run earnings figure of \$119.9 million in the county in 1992, is

Earnings--Alternative 8

almost 90 percent of the regional total in this year. Over the construction build-up phase, earnings are forecast to peak at \$230.6 million, 90 percent of peak earnings forecast under Alternative 7 and 1978 total county earnings. Impact analyses presented for Alternative 7 would be relevant here.



Population



POPULATION

INTRODUCTION (4.3.2.3.1)

For many of the locations and alternatives being examined, a period of rapid, large-scale population growth generated by DDA facility and base construction activities would likely be followed by an almost equally abrupt period of population loss. These fluctuations in the rate and direction of annual population change as a result of the M-X project are likely to have significant consequences for a number of the affected communities and to complicate efforts to accommodate the population influx in an orderly fashion. Changes in the size of a population induce numerous other secondary consequences in communities such as changes in demands for housing and water, changes in needs for various public and private services, changes in traffic volumes, and changes in the size and pattern of local government revenues and expenditures. Furthermore, population growth is ultimately connected to changes in the quality of physical or natural environments; additional population generates increased traffic which produces more atmospheric pollutants, and higher usage levels at outdoor recreation sites in turn affect wildlife and vegetation. On the other hand, not all consequences of population growth are necessarily harmful. For example, a greater range of economic and cultural opportunities may be provided in small communities as growth pushes the population beyond the threshold sizes for various services; and if scale economies exist for certain goods and services, improvements in the economic efficiency of local governments and firms could be expected. For these reasons, population must be considered a significant resource.

The degree of significance of population effects, on the other hand, is especially difficult to define since local governments in the deployment regions have not established growth management policies which explicitly specify acceptable or desirable growth rates or population sizes. Nor are there any state or national standards which provide unambiguous or generally accepted normative criteria for evaluating the acceptability of population increases or rates of change. The more general consensus is that there is no single optimum or ideal population growth rate or size that applies to all communities from which deviations can be measured. For these reasons the potential severity of the consequences of population changes induced by the M-X project, and cumulative change generated by M-X and other

Population

projects in several counties, is assessed in terms of the projected departure from recent historical annual growth rates and deviation from projected future growth rates without the M-X project. This procedure provides a measure of the extent of effects on population, not necessarily the acceptability or desirability of any particular change.

The following sections primarily discuss forecasted aggregate population change as a result of the project, while details about the composition and spatial distribution of project-related in-migrants may be found in Chapter 4 on a year by year basis.

The extent and regional distribution of population changes resulting from M-X deployment are determined by a number of factors. The most important of these are:

- o the design, construction, and operating characteristics of the system, which influence the project direct requirements for labor;
- o the level of secondary employment generated throughout the region due to project expenditures;
- o provisions by the Air Force or its contractors for housing and support of the M-X work force in all phases of the project; and
- o decisions by individuals, businesses, and governments in the affected localities regarding whether or not to develop infrastructure to accommodate M-X-related population growth.

Data on the M-X project's labor and materials demands at specific places, estimated from each alternative's design characteristics, are used to derive industry-specific models of economic activity at the county level. These models, along with baseline population projections, are used to project total employment and labor force in-migration impacts. Project-related population growth is computed as a function of labor force in-migration, and estimated socioeconomic and demographic characteristics of the in-migrants. The M-X-related in-migrants are allocated to places of residence in either construction camps, local communities, or regional population centers based on their household characteristics and the likely availability of housing and other services. Local businesses and governments are assumed to undertake those investments in the region which would be required to support the long-term in-migrant population. If housing, schools and other services are not available, new employees may leave their families behind in other locations, reducing local population growth. Lastly, 80 percent of the military personnel and their dependents are assumed to reside on the bases, while the remainder must obtain housing services in local communities.

Projections of M-X-related population growth are compared to trend-growth baseline population projections prepared by agencies in the affected states (Bureau of Economic and Business Research of the University of Utah, 1980; Texas Department of Water Resources, 1978; Bureau of Business and Economic Research of the University of New Mexico, 1979). In addition, the growth generated by concurrent energy and mineral development projects in several counties is added to

Population--Proposed Action

the population change induced by M-X in order to assess the consequences of cumulative population growth in the region and its communities.

PROPOSED ACTION (4.3.2.3.2)

The Proposed Action, development of DDA facilities in the Nevada/Utah region and operating bases near Coyote Spring Valley, Nevada (Clark County) and Milford, Utah (Beaver County), generates changes in population as a result of procurement expenditures and direct employment during both the construction and operations phases of the project. The timing, size, composition, and spatial distribution of M-X-related in-migrants would vary from place to place depending on the project activities occurring there and the spatial pattern of personal consumption expenditures of direct workers. These characteristics are briefly discussed in the following sections which present the effects of the project at the regional scale and at the county level. Counties primarily affected by operating bases are discussed separately from those which have DDA facility construction only.

Effects at the Regional Scale

Although population effects are substantial at the local level, when viewed in the context of the total 12-county bistate region the population change which would be induced by the Proposed Action should not be significant compared to projected baseline change without the project. The projected M-X related growth during the five year construction "boom" period from 1983 through 1987, the peak year, is about 85,200 persons. This additional population would increase the region's annual compound growth to 4.2 percent from the trend growth rate of 3.2 percent during the same period. With other large-scale energy and mineral development projects in some counties as well as M-X, the region's growth rate is increased to 4.5 percent annually. Inclusion of these projects, while important at the county level, does not significantly alter the regional picture. Figure 4.3.2.3-1 graphically presents the total regional change in population resulting the Proposed Action and the various project alternatives.

The consequences of rapid population growth during the construction "boom" are lessened by the expectation that only about two-thirds of the in-migrants present in the peak year would reside in communities, with the remainder accommodated on the military bases or in temporary construction camps. Approximately 23 percent of the in-migrants present in 1987 (19,500 persons) would be school age children, while another 47 percent would be civilian labor force participants. About 56 percent of the peak year M-X related population would be in Nevada, while 44 percent would be in the Utah portion of the region.

Long-term population effects are projected to be substantially lower than in the peak year as out-migration of construction-related population reduces the total from 85,200 to about 31,100 by 1991. Population losses associated with completion of M-X construction reduces the annual growth rate in the region during the four year period (1988 through 1991) to 1.3 percent from the trend projection of 2.1 percent. Expected concurrent population losses related to the completion of other projects further reduces the growth rate to 1.1 percent. In summary, M-X combined with other projects would increase the region's growth rate to 4.5 percent annually from 1983 through 1987 during the construction "boom", while growth

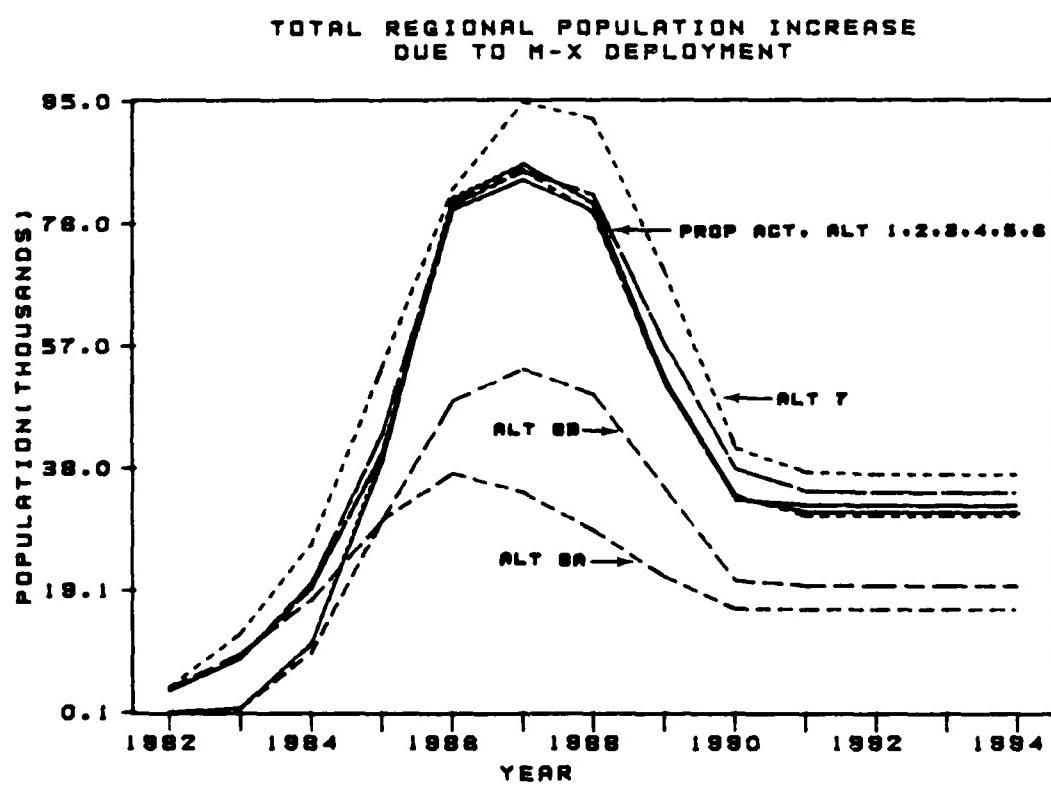


Figure 4.3.2.3-1. (Page 1 of 5)

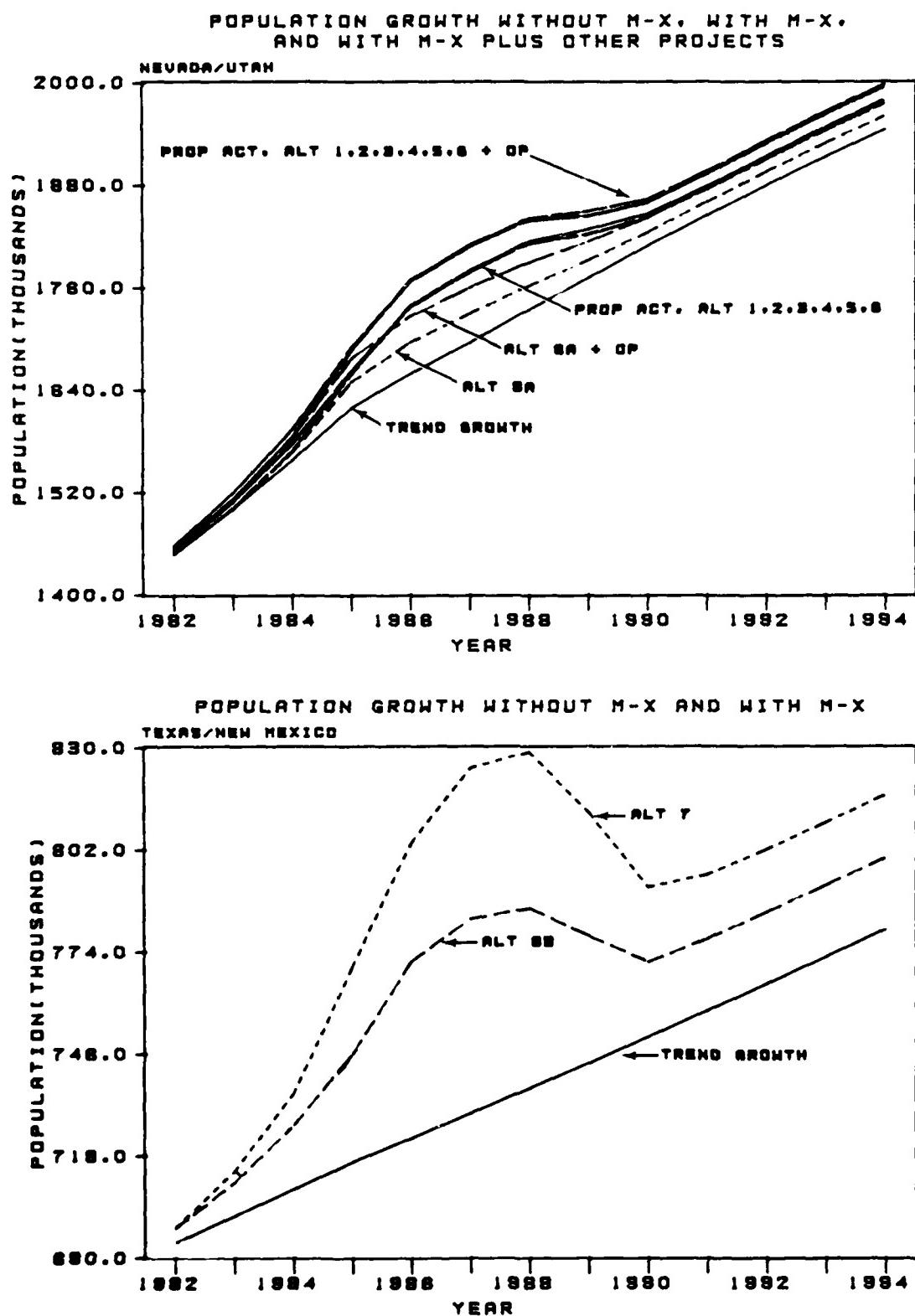


Figure 4.3.2.3-1. (Page 2 of 5)

CA-0010-A

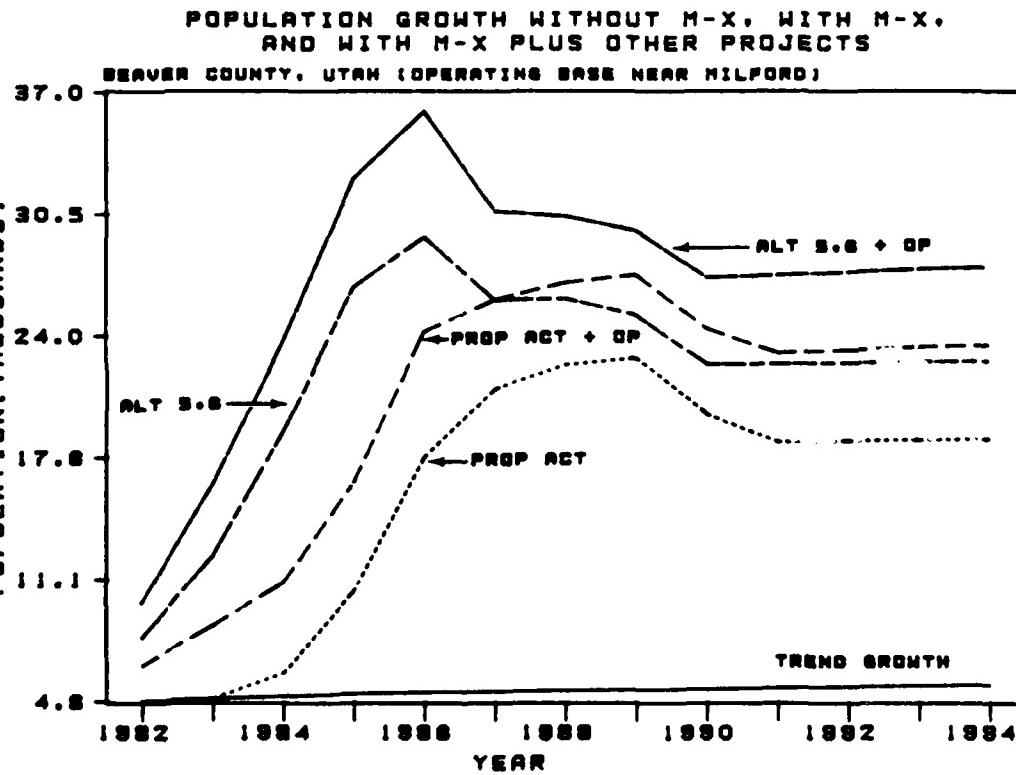
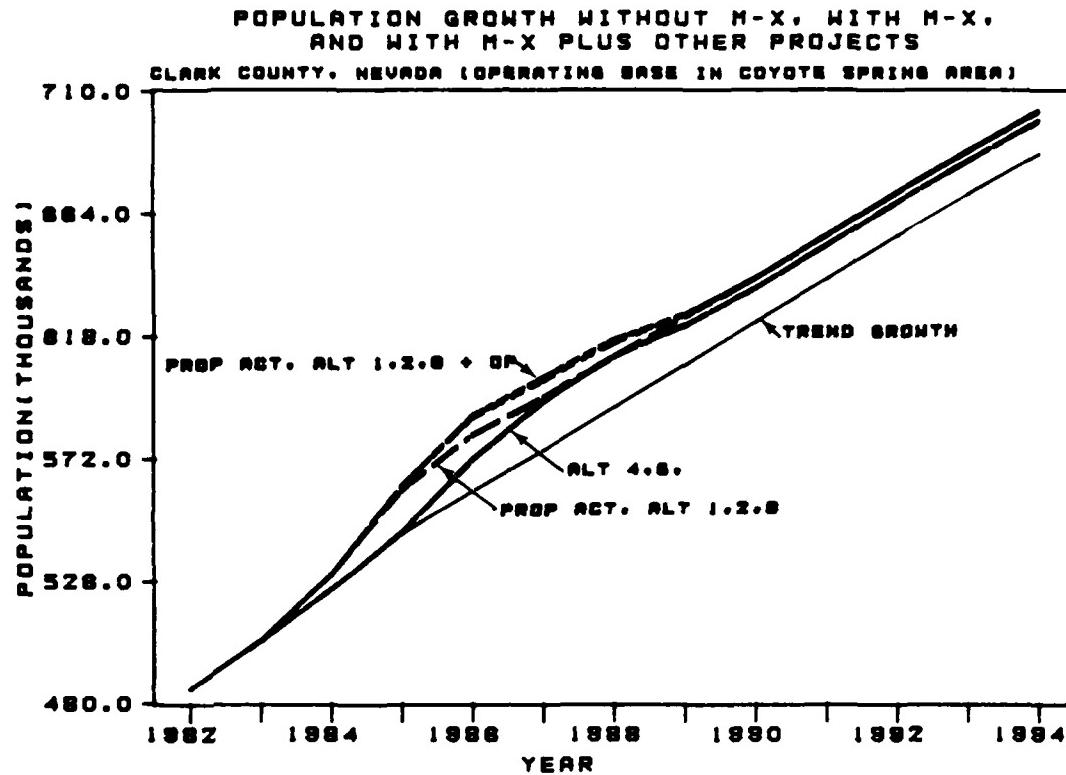


Figure 4.3.2.3-1. (Page 3 of 5)

CA-0011-A

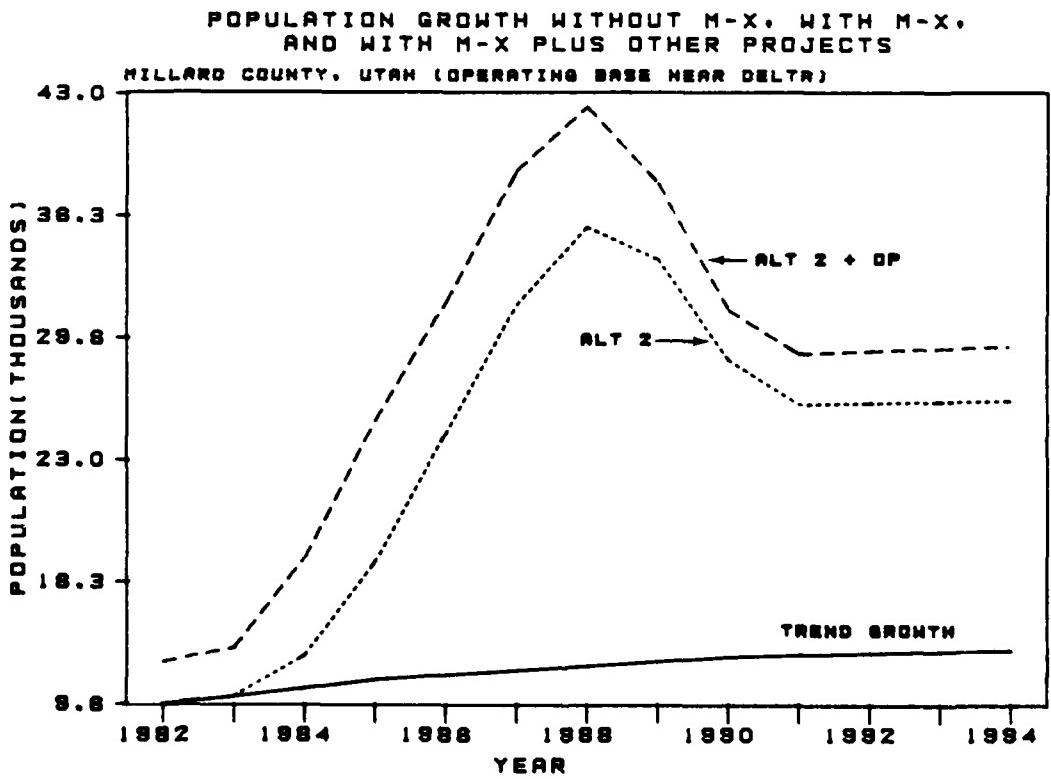
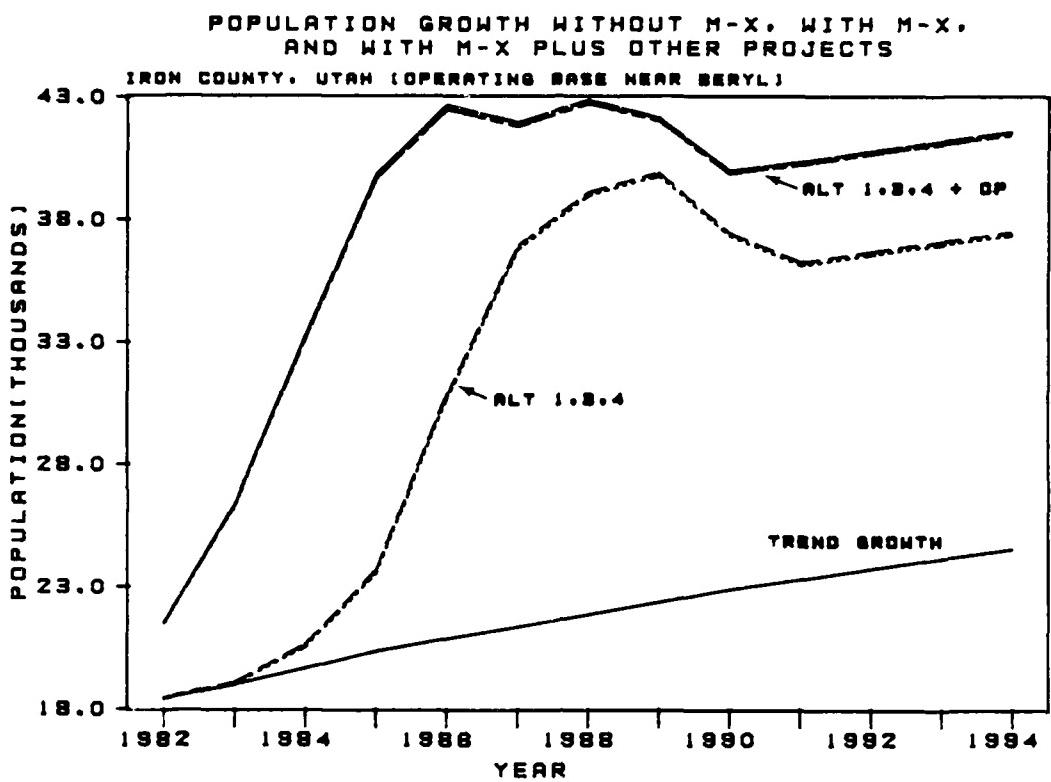


Figure 4.3.2.3-1. (Page 4 of 5)

CA-0012-A

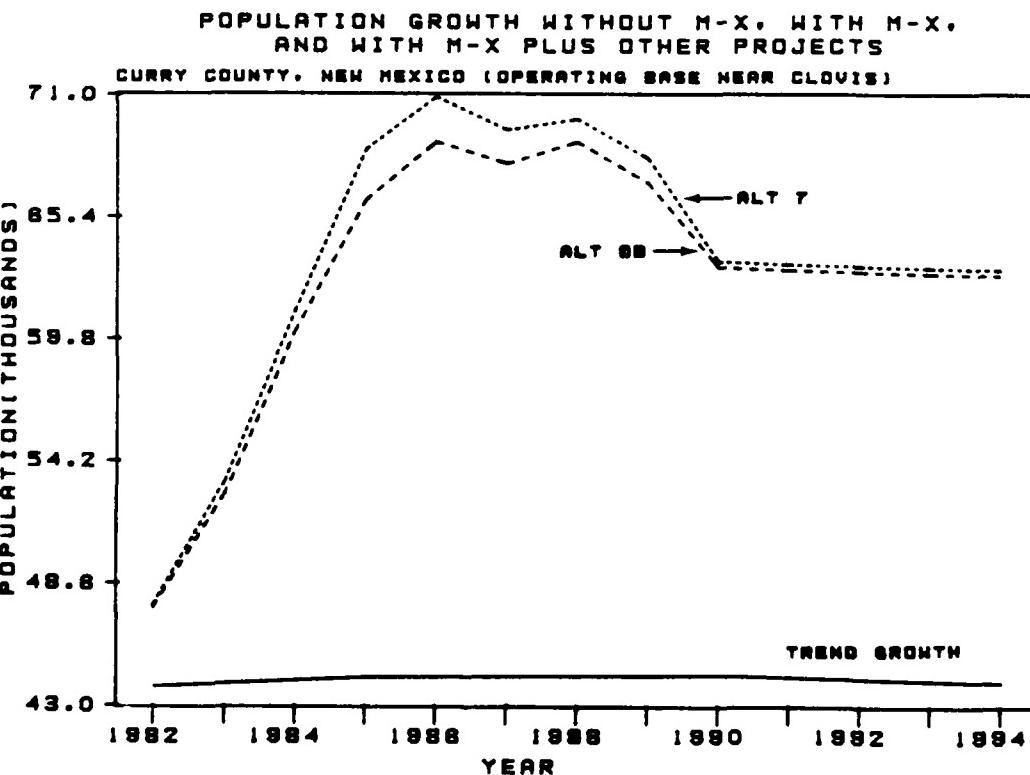
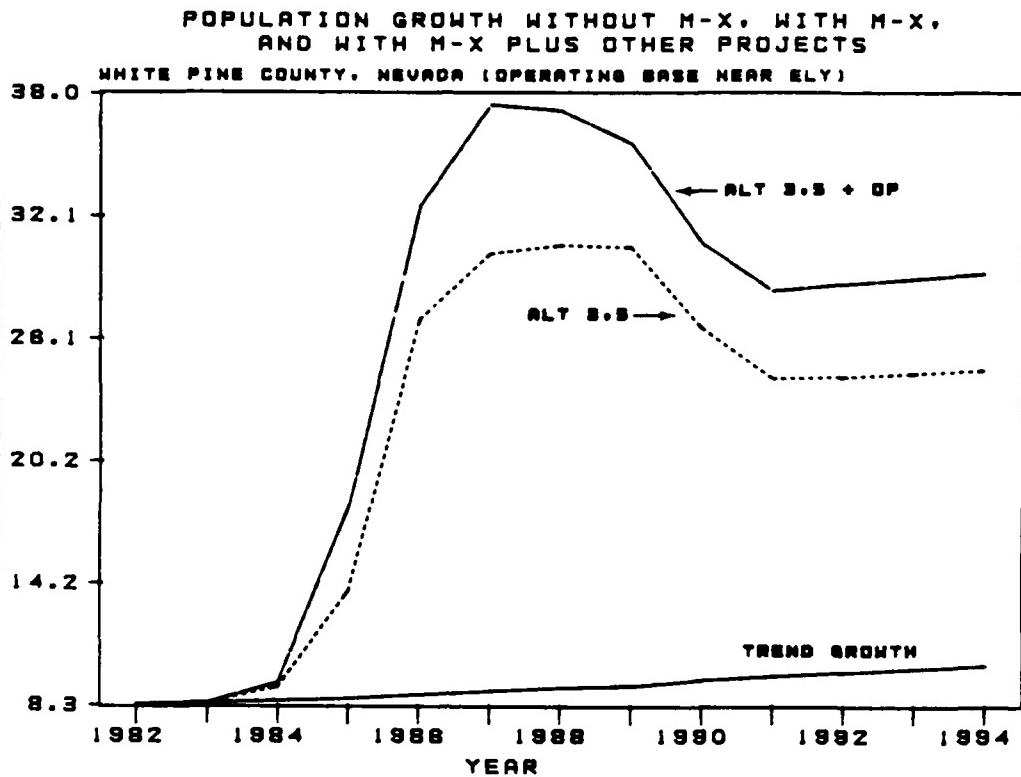


Figure 4.3.2.3-1. (Page 5 of 5)

CA-0013-A

Population--Proposed Action

during the "bust" period from 1988 through 1991 is reduced to an annual rate of 1.1 percent. These fluctuations in growth, while not significant at the regional scale, are likely to complicate efforts to provide the necessary services and facilities to accommodate the population influx in an orderly fashion and without deteriorating living conditions in the most severely affected communities.

Effects at the County Level

In contrast to the findings at the regional scale, the M-X population impacts in some individual counties, especially rural counties, in the Nevada/Utah region would be large and significant. Most of the region is sparsely populated, with 94 percent of the area's population concentrated in the three metropolitan counties, Salt Lake and Utah in Utah, and Clark (Las Vegas) in Nevada. Growth in these three counties would be quite small compared to their populations without M-X while the population of several rural counties, on the other hand, would more than double as a result of M-X related in-migration. The graphs in Figure 4.3.2.3-1 summarizes the projected county population change by year for counties where operating bases are proposed. Table 4.3.2.3-1 presents the peak year and long-term effects at regional and county levels for the Proposed Action and each alternative.

Clark and Beaver Counties, the location of the proposed bases at Coyote Spring Valley and Milford, and Iron and Washington counties receive population effects primarily as a result of construction and operations of the two bases. Additional spillovers would be present in Lincoln and Milford counties, although the major share of their effects during construction is from DDA facilities. At the peak in 1986, Clark County's population is projected to have increased by 27,800 persons as a result of the Proposed Action, which increases the annual rate of growth to 4.9 percent from the trend rate of 3.6 percent over the four year period prior to 1987. This growth is likely to be relatively easily absorbed in Clark County since recent growth, between 1970 and 1978, has been at an annual compound rate of 4.1 percent and a large share of the transient M-X population would be accommodated in temporary facilities on the base. The county's growth rate would be lowered to 2.1 percent annually during the four years from 1987 through 1990 as a result of out-migration of construction-related population, a decline from the 2.7 percent trend rate without the project. In summary, Clark County's annual population growth rate is projected to increase to 4.9 percent for the four years from 1983 through 1986 and decline to 2.1 percent annually for the next four years, compared to growth rates of 3.6 percent and 2.7 percent, respectively, without the M-X project.

Beaver County's population is projected to grow at an annual compound rate of 29.9 percent during the six year construction "boom" period from 1984 through 1989, then drop at a compound rate of -10.3 percent per year for the next two years as construction activities are completed. These compare to trend growth rates of 1.6 percent and 1.0 percent, respectively, for the two periods. The population changes expected as a result of other projects reduce these fluctuations somewhat, since declines after construction of those projects coincide with the period of growth resulting from M-X. The cumulative M-X-related population present in Beaver County would reach a maximum of about 17,700 persons in 1989 before declining to around 13,100 by 1991. The permanent population increase in both Clark and Beaver Counties would consist primarily of military personnel and their

Table 4.3.2.3-1. (page 1 of 3)

NEVADA/UTAH TOTAL POPULATION CHANGE		
DEPLOYMENT REGION		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
PROP. ACTION	45,229 (5.0)	31,096 (1.6)
1	45,235 (5.0)	31,179 (1.6)
2	84,341 (5.0)	30,574 (1.6)
3	83,248 (5.0)	34,180 (1.8)
4	82,753 (4.9)	32,232 (1.7)
5	84,103 (5.0)	34,136 (1.8)
6	82,774 (4.9)	32,167 (1.7)
8A	37,225 (2.2)	16,027 (0.8)
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)	
PROP. ACTION	115,162 (6.8)	50,681 (2.6)
1	115,295 (6.8)	50,713 (2.6)
2	114,396 (6.7)	50,153 (2.6)
3	113,371 (6.7)	53,605 (2.8)
4	112,783 (6.7)	51,766 (2.7)
5	114,349 (6.7)	53,612 (2.8)
6	112,791 (6.7)	51,752 (2.7)
8A	67,751 (4.1)	35,668 (1.8)

CLARK COUNTY, NV.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
PROP. ACTION	27,826 (5.0)	15,367 (2.3)
1	27,838 (5.0)	15,367 (2.3)
2	27,376 (4.9)	15,367 (2.3)
3	591 (0.1)	0 (0.0)
4	18,643 (3.2)	12,195 (1.8)
5	553 (0.1)	0 (0.0)
6	18,577 (3.1)	12,195 (1.8)
8	20,614 (3.7)	15,841 (2.3)
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)	
PROP. ACTION	28,932 (5.2)	16,853 (2.5)
1	29,944 (5.2)	16,853 (2.5)
2	28,482 (5.1)	16,853 (2.5)
3	1,697 (0.3)	886 (0.1)
4	19,670 (3.3)	13,081 (1.9)
5	1,659 (0.3)	886 (0.1)
6	19,605 (0.3)	13,081 (1.9)
8A	21,720 (3.9)	16,727 (2.4)

EUREKA COUNTY, NV.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
PROP. ACTION	4,381 (565.7)	0 (0.0)
1	6,381 (565.7)	0 (0.0)
2	6,381 (565.7)	0 (0.0)
3	6,381 (565.7)	0 (0.0)
4	6,381 (565.7)	0 (0.0)
5	6,381 (565.7)	0 (0.0)
6	6,381 (565.7)	0 (0.0)
8A	3 (0.2)	0 (0.0)
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)	
PROP. ACTION	6,381 (565.7)	0 (0.0)
1	6,381 (565.7)	0 (0.0)
2	6,381 (565.7)	0 (0.0)
3	6,381 (565.7)	0 (0.0)
4	6,381 (565.7)	0 (0.0)
5	6,381 (565.7)	0 (0.0)
6	6,381 (565.7)	0 (0.0)
8	3 (0.2)	0 (0.0)

LINCOLN COUNTY, NV.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
PROP. ACTION	4,758 (115.5)	336 (7.1)
1	4,915 (119.3)	490 (10.4)
2	4,758 (115.5)	193 (4.1)
3	4,758 (115.5)	361 (7.7)
4	4,915 (119.3)	516 (10.9)
5	4,599 (111.6)	117 (3.8)
6	4,728 (114.7)	311 (6.6)
8A	3,553 (87.9)	186 (3.9)
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)	
PROP. ACTION	4,764 (115.6)	341 (7.2)
1	4,921 (119.4)	495 (10.5)
2	4,764 (115.6)	198 (4.2)
3	4,764 (115.6)	365 (7.7)
4	4,921 (119.4)	521 (11.0)
5	4,604 (111.7)	181 (3.8)
6	4,734 (114.9)	316 (6.7)
8	3,559 (88.0)	191 (4.1)

Table 4.3.2.3-1. (page 2 of 3)

NEVADA/UTAH
TOTAL POPULATION CHANGE

JUAB COUNTY, UT.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
PROP. ACTION	5,613 (78.1)	0 (0.0)
1	5,613 (78.1)	0 (0.0)
2	5,111 (85.1)	463 (8.2)
3	5,613 (78.1)	0 (0.0)
4	5,613 (78.1)	0 (0.0)
5	5,613 (78.1)	0 (0.0)
6	5,613 (78.1)	0 (0.0)
8	204 (3.1)	0 (0.0)
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)	
PROP. ACTION	1,829 (108.3)	772 (9.6)
1	1,829 (108.3)	772 (9.6)
2	8,357 (113.8)	1,428 (17.7)
3	1,829 (108.3)	772 (9.6)
4	1,829 (108.3)	772 (9.6)
5	1,829 (108.3)	772 (9.6)
6	1,829 (108.3)	772 (9.6)
8A	1,422 (34.4)	772 (9.6)

MILLARD COUNTY		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
PROP. ACTION	6,347 (54.3)	
1	6,301 (53.3)	
2	24,017 (205.6)	13,617 (11.7)
3	6,301 (53.3)	
4	6,301 (53.3)	
5	6,389 (54.7)	112 (0.0)
6	6,389 (54.7)	112 (0.0)
8A	6,555 (58.6)	0 (0.0)
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)	
PROP. ACTION	12,953 (110.9)	3,035 (24.2)
1	12,933 (110.7)	2,976 (23.6)
2	30,595 (261.9)	16,643 (132.8)
3	12,933 (110.7)	2,976 (23.8)
4	12,933 (110.7)	2,976 (23.8)
5	12,895 (110.4)	3,077 (24.6)
6	12,895 (110.4)	3,077 (24.6)
8A	13,815 (123.4)	2,976 (23.8)

UTAH/SALT LAKE COUNTY, UT.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
PROP. ACTION	6,347 (54.3)	0 (0.0)
1	6,347 (54.3)	0 (0.0)
2	1,422 (34.4)	0 (0.0)
3	1,422 (34.4)	0 (0.0)
4	1,422 (34.4)	0 (0.0)
5	1,422 (34.4)	0 (0.0)
6	1,422 (34.4)	0 (0.0)
8	1,422 (34.4)	0 (0.0)
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)	
PROP. ACTION	1,14 (0.4)	
1	1,14 (0.4)	
2	1,14 (0.4)	
3	1,14 (0.4)	
4	1,14 (0.4)	
5	1,14 (0.4)	
6	1,14 (0.4)	
8	1,14 (0.4)	

WASHINGTON COUNTY, UT.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
PROP. ACTION	640 (2.2)	200 (0.6)
1	1,371 (4.6)	944 (2.8)
2	137 (0.5)	0 (0.0)
3	1,893 (6.2)	1,243 (3.7)
4	1,945 (6.4)	1,298 (3.8)
5	948 (3.4)	267 (0.8)
6	958 (3.4)	322 (1.0)
8A	8 (0.0)	0 (0.0)
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)	
PROP. ACTION	640 (2.2)	200 (0.6)
1	1,371 (4.6)	944 (2.8)
2	137 (0.5)	0 (0.0)
3	1,893 (6.2)	1,243 (3.7)
4	1,945 (6.4)	1,298 (3.8)
5	948 (3.4)	267 (0.8)
6	958 (3.4)	322 (1.0)
8	8 (0.0)	0 (0.0)

Table 4.3.2.3-1. (page 3 of 3)

NEVADA/UTAH

TOTAL POPULATION CHANGE

NYE COUNTY, NV.			WHITE PINE COUNTY, NV.		
ALTER-NATIVE	PEAK YEAR	LONG TERM	ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)			M-X INDUCED CHANGE (% above normal growth baseline)	
PROP. ACTION	11,113 (177.8)	11,113 (177.8)	PROP. ACTION	6,843 (77.7)	0 (0.0)
1	11,113 (177.8)	11,113 (177.8)	1	6,843 (77.7)	0 (0.0)
2	11,113 (177.8)	11,113 (177.8)	2	6,843 (77.7)	0 (0.0)
3	11,113 (177.8)	11,113 (177.8)	3	21,514 (235.1)	14,347 (140.1)
4	11,113 (177.8)	11,113 (177.8)	4	6,843 (77.7)	0 (0.0)
5	11,113 (177.8)	11,113 (177.8)	5	21,514 (235.1)	14,347 (140.1)
6	11,113 (177.8)	11,113 (177.8)	6	6,843 (77.7)	0 (0.0)
8A	11,113 (177.8)	11,113 (177.8)	8A	71 (0.8)	0 (0.0)
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)		ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)	
PROP. ACTION	11,113 (177.8)	11,113 (177.8)	PROP. ACTION	12,601 (143.0)	4,812 (47.0)
1	11,113 (177.8)	11,113 (177.8)	1	12,601 (143.0)	4,812 (47.0)
2	11,113 (177.8)	11,113 (177.8)	2	12,601 (143.0)	4,812 (47.0)
3	11,113 (177.8)	11,113 (177.8)	3	28,019 (306.2)	19,051 (186.1)
4	11,113 (177.8)	11,113 (177.8)	4	12,601 (143.0)	4,812 (47.0)
5	11,113 (177.8)	11,113 (177.8)	5	28,019 (306.2)	19,051 (186.1)
6	11,113 (177.8)	11,113 (177.8)	6	12,601 (143.0)	4,812 (47.0)
8	11,113 (177.8)	11,113 (177.8)	8	5,929 (67.3)	4,812 (47.0)
BEAVER COUNTY, UT.			IRON COUNTY, UT.		
LONG TERM			LONG TERM		
PEAK YEAR			M-X INDUCED CHANGE (% above normal growth baseline)		
(% above normal growth baseline)			(% above normal growth baseline)		
ALTER-NATIVE			ALTER-NATIVE		
PROP. ACTION			PROP. ACTION		
1			1	2,072 (9.5)	
2			2	17,431 (77.9)	
3			3	459 (2.2)	
4			4	11,642 (103.7)	
5			5	11,642 (103.7)	
6			6	2,867 (12.8)	
8			8A	2,867 (12.8)	
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)		ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)	
PROP. ACTION			PROP. ACTION		
1	12,083 (420.3)		1	1,452 (5.9)	
2	15,700 (209.2)		2	12,834 (52.3)	
3	15,420 (203.7)		3	459 (2.2)	
4	11,167 (218.3)		4	11,642 (103.7)	
5	11,167 (218.3)		5	16,943 (69.0)	
6	30,889 (603.9)		6	16,343 (69.0)	
8A	30,889 (603.9)		8A	2,006 (8.2)	
ALTER-NATIVE			ALTER-NATIVE		
PROP. ACTION			PROP. ACTION		
1	8,995 (174.3)		1	2,006 (8.2)	
2	8,995 (174.3)		2	2,989 (13.4)	
3	8,995 (174.3)		3	2,989 (13.4)	
4	8,995 (174.3)		4	2,989 (13.4)	
5	8,995 (174.3)		5	2,989 (13.4)	
6	8,995 (174.3)		6	2,989 (13.4)	
8A	8,995 (174.3)		8A	535 (2.5)	

Population--Proposed Action

dependents, and the greatest share of in-migrants are projected to reside on the bases rather than in local communities. Permanent population growth projected for the other affected counties--Lincoln, Iron, Millard, and Washington--is small relative to their baseline populations.

A more pronounced "boom-bust" cycle of population change would be likely to occur in the region's rural counties affected primarily by DDA facility construction. Short-lived population increases during construction of these facilities would occur in Eureka, Lincoln, Nye, and White Pine counties, Nevada, and Juab, Millard, and Beaver counties, Utah. Annual compound rates of population growth during the construction "boom," which occurs in different periods ranging from three to five years in the various counties, are as follows: Eureka, 63 percent; Lincoln, 19 percent; Nye, 17 percent; White Pine, 23 percent; Beaver, 30 percent; Juab, 21 percent; and Millard, 12 percent. These high annual growth rates are followed by a period of abrupt population loss when out-migration of construction-related population occurs as those activities are completed. These losses are experienced during different time intervals ranging in duration from two to five years in the various counties. Annual compound rates of population loss during the "bust" phase are: Eureka, -60 percent; Lincoln, -11 percent; Nye, -19 percent; White Pine, -12 percent; Beaver, -10 percent; Juab, -16 percent; and Millard, -18 percent.

The "boom-bust" cycle is accentuated in several counties by the cumulative effects of other concurrent projects. M-X-related growth plus growth associated with these projects increases the "boom" period annual growth rate in White Pine County to 36 percent and that in Millard to 14 percent. On the other hand, population change associated with other projects lowers annual growth rates in Juab and Beaver counties since declines after construction of those projects coincide with growth induced by M-X. The high annual growth rates during the construction boom compare with historical and trend projection rates of 1 to 3 percent in most counties, with the exception of White Pine, which experienced population losses during the 1970s. The rapid, large-scale growth in these sparsely populated rural counties, followed by rapid population losses, is likely to have significant consequences for their communities. These consequences are likely to be less, however, than might be suggested by aggregate population changes since large shares of the in-migrants would be present without families and provided accommodations in temporary construction camps rather than in communities.

Adverse consequences are not likely to be entirely avoided but the magnitude of population effects may be reduced by modifying the Proposed Action in terms of the timing of construction activities and/or spatial distribution of facilities among the counties. For example, decentralization of some base functions to several Area Support Centers (ASCs) in other counties may spread the consequences of permanent population increases among more counties, reducing the effects on the county containing the base. The large-scale but temporary population increases in DDA-affected counties could be reduced by extending the construction schedule over a longer period of time, by phasing the construction so that M-X-related population influxes do not coincide with population growth induced by other projects, and by encouraging a greater share of transient construction workers to leave their families in other areas through financial incentives such as family housing allowances. Assistance for advance planning to manage growth and sharing of information with affected communities so that they are apprised of anticipated changes. Designation of "new towns", or specific development zones to accommodate the permanent

population growth near bases, could reduce adverse effects on existing communities, as could housing a larger share of military households onbase. Specific forms of financial and technical assistance to mitigate the consequences of population growth once it has taken place, are discussed in subsequent sections for separate resource categories pertaining to community housing, land use and infrastructure, public and private services, and public finance.

ALTERNATIVE 1 (4.3.2.3.3)

Under this alternative, DDA facilities and the base at Coyote Spring Valley would remain the same, but the second base at Milford is shifted to the vicinity of Beryl, Utah, in Iron County. At the regional and state levels, population effects are virtually identical with those projected for the Proposed Action. At the county level, population effects associated with the second base are shifted primarily to Iron County, with some spillovers to adjacent Washington and Beaver counties. M-X-related population growth in Beaver is reduced to 3,900 in 1986, the peak year, with a compound annual growth rate of 24 percent sustained over the three years from 1984 through 1986. In the long-term, the permanent population increase is projected to be about 900 persons in the county. M-X-related population growth in Iron County, on the other hand, is increased significantly compared to the proposed action. By 1989, the peak year, the number of project-related in-migrants present in the county is projected to total 17,400. This growth would represent an annual increase of 13 percent over the six year construction boom period from 1984 through 1989, compared to a trend growth rate of 2.8 percent over the same period. Population losses after the completion of construction activities would reduce M-X-related in-migration to a long-term level of about 12,800 by 1991, for an annual rate of decline of -4.7 percent over the two year period.

ALTERNATIVE 2 (4.3.2.3.4)

For this alternative, DDA facilities and the base at Coyote Spring Valley would remain the same, but the second base would be located in the vicinity of Delta, Utah, in Millard County. At the regional and state levels, population effects again remain virtually identical to those forecast for the Proposed Action. The only substantial difference is at the county level where the growth in Millard County would be increased significantly. At the peak during construction in 1988, the cumulative M-X-related in-migration to Millard would reach about 24,000 persons, resulting in an annual compound growth rate of 19 percent over the preceding five years. If the effects of other projects are added to the M-X-related population growth, the rate of increase is higher at 27 percent annually over the same period. Population losses after construction activities are completed reduce M-X-related growth to about 13,700 persons in Millard County by 1991, a compound annual rate of decline of -10 percent during the three year period. If the effects of other concurrent projects are added, this rate of decline is greater at -12 percent per year.

On the other hand, population effects are considerably less in Beaver County compared to the Proposed Action, although the consequences of population growth during the construction boom are likely to remain significant. The peak would occur in 1986 when a total of about 3,600 M-X-related in-migrants are projected to be present in the county, representing a 22 percent annual growth rate over the three year period from 1984 through 1986. The addition of effects from other projects

does not substantially alter the picture since a large share of that growth would occur prior to M-X construction. Recent historical growth rates have averaged 1.0 percent annually in Beaver County and 2.5 percent in Millard County.

ALTERNATIVE 3 (4.3.2.3.5)

For this alternative, the DDA facilities remain the same as for the proposed action, but the bases are located near Beryl, Utah (Iron County), and Ely, Nevada (White Pine County). Population effects at the regional level would not be substantially different from those projected for the Proposed Action. At the county level, population effects in Clark County would become negligible and the magnitude of growth is reduced in Beaver County. On the other hand, significant growth associated with the bases would occur in Iron and White Pine counties, with some spillover into adjacent Washington and Beaver counties from the base near Beryl. The number of M-X-related in-migrants present in Iron is projected to reach a peak of 21,600 in 1986, leading to an annual growth rate of 19 percent over the five year period from 1982 through 1986, compared to a trend growth rate of 3.1 percent for the same years. Population losses after the construction "boom" is over reduce the level of permanent in-migration to about 17,000 by 1990, for a rate of population decline of -1.6 percent annually over the four year period from 1987 through 1990.

With the second operating base near Ely, population in White Pine County is projected to grow at a rate of 29 percent annually over the five year construction boom from 1984 through 1988. This rapid growth would be followed by declines of -7.5 percent annually for the next three years as construction-related population migrates out of the area. If the effects of other projects are added to the M-X-related population change, the rate of growth during the construction "boom" is higher at about 35 percent annually, while the severity of the "bust" is also increased to an annual rate of loss of -8.5 percent. The number of M-X-related in-migrants present in the county would reach a maximum level of about 21,500 in 1988, with losses after construction is completed reducing the permanent total to 14,300. Smaller permanent population effects would be experienced in Lincoln, Beaver, and Washington counties.

ALTERNATIVE 4 (4.3.2.3.6)

The distribution of DDA facilities would be identical with the Proposed Action while Base I is located near Beryl, Utah (Iron County) and Base II at Coyote Spring Valley, Nevada (Clark County). At the regional level, there are no significant differences from the Proposed Action in terms of population effects, although at the state level Utah receives a larger share of the impact--54 percent of the peak year population effect and 63 percent of the long-term impact. At the county level, substantial population growth would be experienced in Iron County and lesser growth would occur in Beaver compared to the Proposed Action. Small permanent population gains are projected for Lincoln, Beaver, and Washington counties.

The number of M-X-related in-migrants present in Iron County is projected to reach a peak of 21,600 by 1986, but would decline to a permanent level fo 17,000 by 1990 as population losses occur when construction-related population leaves the area. The annual growth rate over the construction "boom" period from 1982 through 1986 reaches 24 percent, while declines of -1.6 percent annually are forecast for the following four years. These compare with trend growth rates of 3.1

and 2.4 percent, respectively, during the two time intervals. In Clark County, the projected M-X related growth is shifted further into the future and slightly reduced from that projected for the Proposed Action. The number of in-migrants present in the county would reach a maximum of 18,600 in 1988 before declining to a permanent level of 12,200 by 1990.

ALTERNATIVE 5 (4.3.2.3.7)

For this alternative, the distribution of DDA facilities would be identical to the Proposed Action while the two bases are located near Milford (Beaver County) and Ely (White Pine County). No significant differences from the Proposed Action are projected at the regional level, although a greater share of population growth is transferred to Utah. At the county level, the major effects would occur in White Pine county, with a substantially higher growth rate and a permanent population effect, and in Beaver County, where growth would be slightly higher than predicted for the Proposed Action.

In White Pine, the number of M-X-related in-migrants present in the county would reach a peak of 21,500 in 1988 before losses after completion of construction activities reduce the permanent population effect to 14,300 by 1992. The county's population is projected to grow at an annual rate of 29 percent over the five year construction "boom" period from 1984 through 1988, before declining at an annual rate of -7.5 percent for the next three years. The effects of concurrent projects increase the rate of growth during the M-X "boom" period to about 35 percent, and annual rates of decline during the "bust" phase are increased to -8.5 percent. The equivalent trend growth rates are 1.7 and 2.0 percent, respectively.

With the operating base near Milford, Beaver County's population growth rate is projected to reach 45 percent annually over the five year construction "boom" period from 1982 through 1986, followed by annual population declines of about 6 percent over the next four years. The effects of other concurrent projects accentuate both the "boom" and "bust" phases of the cycle. These rates of change compare to projected trend growth rates of 2.4 and 0.9 percent, respectively, during the two periods and estimated recent growth of just over 1.0 percent annually. The number of M-X-related in-migrants present in the county would reach a maximum of 24,200 in 1986 before out-migration of construction related population reduces the total to a permanent level of 17,200 by 1990.

ALTERNATIVE 6 (4.3.2.3.8)

The distribution of DDA facilities would be identical to the Proposed Action, with the first base near Milford (Beaver County) and the second in Coyote Spring Valley (Clark County). No significant differences from the Proposed Action are projected at the regional level, although a greater share of the population growth would occur in Utah. At the County level, population effects are projected to be slightly higher in Beaver and lower in Clark compared to the Proposed Action. With the first base near Milford, Beaver's growth rate is projected to reach about 45 percent annually over the five year construction "boom" period from 1982 through 1986, followed by declines of about -6 percent annually for the subsequent four years. The effects of other projects accentuate both the "boom" and "bust" periods. These rates of change contrast with the projected trend growth of 2.4 and 0.9 percent, respectively, during the two periods and estimated annual growth of

just over 1.0 percent from 1970 through 1977. The number of M-X-related in-migrants present in the county would reach a maximum of 24,200 in 1986 before out-migration of construction population reduces the total to a permanent level of 17,200 by 1992.

In Clark County, M-X-related growth is shifted further into the future and reduced from the levels projected for the Proposed Action. The annual growth rate with M-X is reduced to 3.9 percent from 4.9, compared to a projected trend growth rate of 2.9 percent annually. The effect should not be significant since recent growth has been estimated at over 4.0 percent annually. The number of in-migrants would reach a peak of 18,600 in 1988 before falling to 12,200 by 1990 as construction related population leaves the area. In addition, smaller numbers of permanent in-migrants would be present in Lincoln, Iron, Washington, and Millard counties.

ALTERNATIVE 7 (4.3.2.3.9)

The DDA facilities would be located within Texas and New Mexico with bases near Clovis, New Mexico (Curry County) and Dalhart, Texas (Hartley County). At the regional level, population growth in the 30-county Texas/New Mexico region is projected to reach a peak of 94,800 in 1987, almost 10,000 higher than forecast in the Nevada/Utah region as a result of the Proposed Action. The M-X induced population change would not be significant at the regional level compared to projected baseline change without the project. M-X induced growth during the construction "boom" from 1983 through 1987 increases the annual compound growth rate to 3.4 percent, compared to one percent annually without the project. Population losses after the construction period would reduce the in-migrant population total to 37,000 by 1991, a rate of decline of 0.9 percent annually for the four year period. About 23 percent of the in-migrants present during the peak year would be school age children, while another 48 percent are civilian labor force participants. On the long term the equivalent proportions are 28 and 19 percent respectively. Table 4.3.2.3-2 presents the population change for each alternative potentially impacting Texas/New Mexico.

In contrast to the finding at the regional level, effects during the construction "boom" period are likely to be large and significant in a number of counties. In these areas annual compound rates of population change during the construction boom period, which ranges from three to five years in the various counties, are as follows; Bailey 8.2; Dallam, 23.6; Deaf Smith, 6.9; Hartley, 37.7; Moore, 6.9; Parmer, 11.2; Potter/Randall, 3.3; Chaves, 6.5; Curry, 10.3; Harding, 87.5; Quay, 14.4; and Roosevelt, 5.5. With the exception of Curry, Dallam, Hartley, and Potter/Randall counties, population growth would be short-lived as a result of DDA facility construction. The high rates of growth in these counties would be followed by an equally abrupt period of population losses when construction-related population leaves the area. Sizable permanent population growth would occur in Curry, Dallam, and Hartley counties, with lesser permanent effects in Lubbock, Moore, Potter/Randall, and Roosevelt counties as a result of the operating bases.

The high rates of growth induced by M-X contrast with populations which have been virtually stationary or growing very slowly in the majority of the rural counties within the affected region. The projected population increases would represent significant increases in demands for housing, schools, health care, and other

Table 4.3.2.3-2. (page 1 of 3)

TEXAS/NEW MEXICO		
TOTAL POPULATION CHANGE		
DEPLOYMENT REGION		
ALTER-NATIVE	PEAK YEAR	LONG TERM
H-X INDUCED CHANGE (% above normal growth baseline)		
7	94,796 (13.0)	36,952 (4.7)
8 B	53,361 (7.3)	19,694 (2.5)
BAILEY COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
H-X INDUCED CHANGE (% above normal growth baseline)		
7	3,059 (36.3)	0 (0.0)
8 B	514 (6.1)	0 (0.0)
CASTRO COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
H-X INDUCED CHANGE (% above normal growth baseline)		
7	393 (3.6)	0 (0.0)
8 B	237 (2.2)	0 (0.0)
COCHRAN COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
H-X INDUCED CHANGE (% above normal growth baseline)		
7	125 (2.4)	0 (0.0)
8 B	111 (2.1)	0 (0.0)
DALE COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
H-X INDUCED CHANGE (% above normal growth baseline)		
7	12,625 (172.2)	1,613 (20.2)
8 B	3,490 (47.6)	0 (0.0)
DEAF SMITH, COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
H-X INDUCED CHANGE (% above normal growth baseline)		
7	5,444 (25.9)	0 (0.0)
8 B	3,194 (15.5)	0 (0.0)
HALE COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
H-X INDUCED CHANGE (% above normal growth baseline)		
7	751 (1.9)	0 (0.0)
8 B	125 (0.3)	0 (0.0)
HARTLEY COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
H-X INDUCED CHANGE (% above normal growth baseline)		
7	14,362 (347.7)	11,199 (242.9)
8 B	3,337 (80.8)	0 (0.0)

3742

Table 4.3.2.3-2. (page 2 of 3)

**TEXAS/NEW MEXICO
TOTAL POPULATION CHANGE**

HOCKLEY COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
7	483 (2.2)	0 (0.0)
8 B	209 (0.3)	0 (0.0)

LAMB COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
7	214 (1.2)	0 (0.0)
8 B	174 (1.0)	0 (0.0)

LUBBOCK COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
7	5,512 (2.3)	59 (0.0)
8 B	3,726 (1.6)	0 (0.0)

MOORE COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
7	3,227 (21.5)	1,569 (10.1)
8 B	272 (1.8)	0 (0.0)

OLDHAM COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
7	143 (4.9)	0 (0.0)
8 B	61 (2.1)	0 (0.0)

PARMER COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
7	3,870 (37.5)	0 (0.0)
8 B	44 (0.4)	0 (0.0)

POTTER/RANDALL COUNTIES, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
7	15,365 (8.7)	2,752 (1.4)
8 B	3,877 (2.2)	214 (0.1)

SHERMAN COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
7	702 (17.8)	0 (0.0)
8 B	0 (0.0)	0 (0.0)

Table 4.3.2.3-2. (page 3 of 3)

TEXAS/NEW MEXICO TOTAL POPULATION CHANGE					
SWISHER COUNTY, TX.			CHAVES COUNTY, NM.		
ALTER-NATIVE	PEAK YEAR	LONG TERM	ALTER-NATIVE	PEAK YEAR	LONG TERM
M-X INDUCED CHANGE (% above normal growth baseline)					
7	135 (1.2)	0 (0.0)	7	5,790 (10.2)	0 (0.0)
8 B	70 (0.6)	0 (0.0)	8 B	4,948 (8.5)	0 (0.0)
CURRY COUNTY, NM.			DE BACA COUNTY, NM.		
ALTER-NATIVE	PEAK YEAR	LONG TERM	ALTER-NATIVE	PEAK YEAR	LONG TERM
M-X INDUCED CHANGE (% above normal growth baseline)					
7	26,594 (60.0)	18,934 (43.0)	7	121 (4.7)	0 (0.0)
8 B	24,532 (55.4)	18,669 (42.4)	8 B	123 (4.9)	0 (0.0)
HARDING COUNTY, NM.			QUAY COUNTY, NM.		
ALTER-NATIVE	PEAK YEAR	LONG TERM	ALTER-NATIVE	PEAK YEAR	LONG TERM
M-X INDUCED CHANGE (% above normal growth baseline)					
7	5,711 (601.2)	0 (0.0)	7	5,545 (49.1)	0 (0.0)
8 B	5,167 (543.9)	0 (0.0)	8 B	4,722 (42.0)	0 (0.0)
ROOSEVELT COUNTY, NM.			UNION COUNTY, NM.		
ALTER-NATIVE	PEAK YEAR	LONG TERM	ALTER-NATIVE	PEAK YEAR	LONG TERM
M-X INDUCED CHANGE (% above normal growth baseline)					
7	6,145 (36.1)	826 (4.7)	7	166 (3.4)	0 (0.0)
8 B	5,275 (31.1)	811 (4.6)	8 B	0 (0.0)	0 (0.0)

Population--Alternative 8

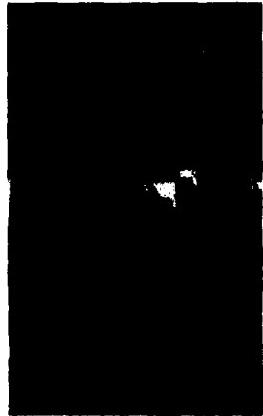
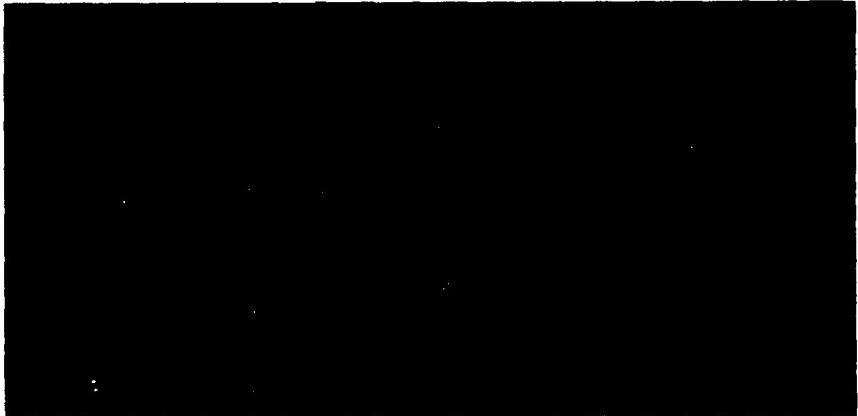
community services. They also constitute fundamental changes, on either a temporary or permanent basis, in the rural town character of many deployment region communities. Adverse consequences are likely to be less, however, than might be suggested by aggregate population changes, since large shares of the construction population would be present without families and accommodated in temporary group quarters, and a large share of permanent in-migrants, about 60 percent, would be housed on the two operating bases.

ALTERNATIVE 8 (4.3.2.3.10)

The Nevada/Utah portion of the split deployment alternative consists of one-half of the DDA facilities and an operating base near Coyote Spring Valley, Nevada (Clark County). The number of M-X-related in-migrants present in the 12-county region is projected to reach a maximum of 37,200 in 1986, about 44 percent of the amount forecasted for the full-deployment Proposed Action. The major share of the population impact would be experienced in Nevada, which would contain 70 percent of the DDA facilities in the region. Peak year impacts remain large and significant in Clark, Lincoln, Nye, Beaver, and Millard counties, but are negligible in other counties in the region. Permanent population growth related to the base is limited to Clark county, with a small spillover to adjacent Lincoln county. With the base at Coyote Spring Valley, the number of in-migrants present in Clark County is projected to reach a maximum level of 20,600 in 1986, but would decline to a permanent level of 15,800 by 1989 as a result of out-migration by construction population. The growth rate during the construction boom from 1983 through 1986 is increased to 4.6 percent annually from a projected trend growth of 3.6 percent during the same period. The consequences of M-X-related population growth in Clark County are not likely to be significant since the population growth rate exceeded 4 percent annually during the period from 1970 through 1977.

The Texas/New Mexico portion of the split deployment alternative consists of one-half of the DDA facilities and an operating base near Clovis, New Mexico, in Curry County. The number of M-X-related in-migrants present in the 30-County bistate region is projected to reach a maximum of about 53,400 in 1987, about 56 percent of the total amount forecasted for the full deployment alternative. Construction "boom" period impacts are large and significant only in Dallam, Deaf Smith, Hartley, Chaves, Curry, Harding, Quay, and Roosevelt counties. Permanent population change, about 19,700 persons in the region, is projected to occur only in Curry and adjacent Roosevelt counties in New Mexico, and the metropolitan Amarillo, Texas area. With the base near Clovis, the number of in-migrants present in Curry County is projected to reach a maximum of 24,500 in 1986 before out-migration of construction-related population lowers the total to 18,700 by 1990. The annual rate of population growth during the construction "boom" from 1982 through 1986 is increased to 9.6 percent from a projected trend rate of 0.4 percent during the same period. The significance of the high growth rate is reduced by the expectation that a large share of both temporary and permanent in-migrants would be housed on the base rather than in the county's communities.

Housing



HOUSING

INTRODUCTION (4.3.2.4.1)

Among impact problems attending rapid population growth, the provision of housing is one of the most complex. Housing or the lack of it is seen as a major problem in communities experiencing rapid growth, particularly those in more isolated rural areas. Local capital sources are usually very limited, and construction capital and mortgage money are often inadequate. Local builders typically have limited production capacity and experience and both builders and local financial institutions find boom town uncertainty disturbing. These circumstances can lead to severe housing shortages and rapid inflation of existing housing and rental unit prices. Since the lack of housing has often been cited as a major factor in high worker turnover rates, and in the difficulty of recruiting key professional people, good, adequate housing is a fundamental necessity for the success of any large-scale project. Community officials need to know how many housing units will be needed well in advance so that they and builders and local contractors have time to adjust to the need for immediate and temporary housing.

Measurement of Housing Requirements

Cumulative and annual housing requirements are a function of the number and types of project-related households expected to reside in local communities and the number and types of housing units that must be provided in order to accommodate them. These housing requirements do not include estimates for housing in the outlying construction camps and on the bases, since these are presumed to be provided, in the form of group quarters, by the contractors or the federal government. An allowance for a vacancy rate of 5 percent for turnover and for units which are removed from the market inventory due to events such as fires and demolitions is also made. The number of households is derived by dividing population residing in local communities, which is variable from year to year depending on project activities in the area, and consists of seven project-related employment categories, by a corresponding average household size for each population category.

Significance of Impacts

Since there are no established standards or norms for housing unit demand growth, the significance of M-X housing requirements impacts can best be thought

of as a function of the severity of the impact. This is determined by comparing M-X's increase in long-term housing requirements normal growth and by comparing M-X's housing requirements over the construction period requirements to the normal growth baseline requirements during the same period.

Significant growth is defined as an annual growth rate of more than 30 percent or more, or an annual growth rate double that of the no-project projection. With these limitations almost all of the deployment region counties will be significantly impacted, if only temporarily. The only clear exceptions are the metropolitan counties of Clark, Salt Lake and Utah.

The following sections discuss the broad aggregate housing impacts.

PROPOSED ACTION (4.3.2.4.2)

The housing requirements impact is caused by the decision to deploy the M-X system in Nevada/Utah, with bases in Coyote Spring and Milford and the resultant demand for direct and indirect labor. Since the regional and local labor markets are not sufficiently large to provide all of the necessary labor, the balance is met by substantial in-migration and these in-migrants needed to be housed. The brunt of the requirements, particularly the long-term ones will be felt in the two base counties, Clark and Beaver, and in adjacent counties that will be effected by spillover. Major, albeit short-lived impacts will be felt, to varying degrees, throughout the deployment region counties as construction of the DDA facilities proceeds, peaks and culminates.

Deployment Region Impacts

Table 4.3.2.4-1 shows the peak-year and long-term M-X related housing requirements along with the cumulative requirements of M-X and other anticipated projects in the region. The M-X related housing requirements reach a peak of 20,000 units in 1987, representing a 3.5 percent increase over baseline. The cumulative impact of M-X and other projects total some 30,300 units, or 5.3 percent above baseline. Over the 1982 to 1987 construction period the normal growth baseline requirements are projected to total some 84,700 additional units, thus M-X will increase the demand for additional housing by about 23.6 percent. When other projects are taken into account, the combined demand increases to 35.8 percent. Nevada and Utah's share of the M-X related peak housing requirements are about equal, although M-X's peak increase over their respective normal growth baselines do differ.

After 1987, the peak year housing requirements fall off as construction is completed, reaching a long-term level of some 3,200 units, representing a 0.5 percent increase over normal growth. This drop in housing unit requirements will leave a surplus of some 16,800 units by 1992. Such a surplus could lead to serious removal problems, although some of the surplus could be used to help meet the normal growth baseline needs of some 63,700 additional housing units over the 1987-1992 period. With other projects the surplus is slightly smaller. In the long-term, the two states' share of the M-X related impact differs from the equal split at the peak of construction. By 1994, Nevada is projected to have only 36 percent of

AD-A104 359 AIR FORCE SYSTEMS COMMAND WASHINGTON DC
DRAFT ENVIRONMENTAL IMPACT STATEMENT. MX DEPLOYMENT AREA SELECT--ETC(1)
DEC 80

UNCLASSIFIED AFSC-TR-81-59

F/G 5/3

NL

2 0^o 3

20
204359



Table 4.3.2.4-1. (page 1 of 3)

NEVADA/UTAH TOTAL HOUSING REQUIREMENTS (IN TOTAL UNITS)					
DEPLOYMENT REGION			CLARK COUNTY, NV.		
ALTER-NATIVE	PEAK YEAR	LONG TERM	ALTER-NATIVE	PEAK YEAR	
	M-X INDUCED CHANGE (% above normal growth baseline)			M-X INDUCED CHANGE (% above normal growth baseline)	
PROP. ACTION	20,002 (3.5)	3,202 (0.5)	PROP. ACTION	6,860 (3.3)	1,016 (0.4)
1	20,029 (3.5)	3,233 (0.5)	1	6,865 (3.3)	1,016 (0.4)
2	19,598 (3.4)	2,852 (0.4)	2	6,692 (3.2)	1,016 (0.4)
3	19,592 (3.4)	4,455 (0.7)	3	222 (0.1)	0 (0)
4	19,789 (3.4)	3,725 (0.6)	4	4,857 (2.3)	776 (0.3)
5	19,631 (3.4)	4,439 (0.7)	5	207 (0.1)	0 (0)
6	19,797 (3.4)	3,702 (0.6)	6	4,838 (2.2)	776 (0.3)
8	7,778 (1.4)	1,078 (0.2)	8 a	4,459 (2.1)	1,008 (0.4)
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)		ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)	
PROP. ACTION	30,335 (5.3)	9,946 (1.5)	PROP. ACTION	7,275 (3.5)	1,348 (0.5)
1	30,371 (5.3)	9,958 (1.5)	1	7,279 (3.5)	1,348 (0.5)
2	29,939 (5.2)	9,594 (1.4)	2	7,106 (3.4)	1,348 (0.5)
3	29,902 (5.2)	11,139 (1.7)	3	636 (0.3)	0 (0)
4	30,127 (5.2)	10,449 (1.6)	4	5,278 (2.4)	1,108 (0.4)
5	29,930 (5.2)	11,141 (1.7)	5	622 (0.3)	0 (0)
6	30,123 (5.2)	10,444 (1.6)	6	5,258 (2.4)	1,108 (0.4)
8	18,262 (3.2)	7,842 (1.2)	8	4,872 (2.3)	1,340 (0.5)
EUREKA COUNTY, NV.					
ALTER-NATIVE	PEAK YEAR	LONG TERM	ALTER-NATIVE	PEAK YEAR	
	M-X INDUCED CHANGE (% above normal growth baseline)			M-X INDUCED CHANGE (% above normal growth baseline)	
PROP. ACTION	1,473 (289.9)	0 (0)	PROP. ACTION	1,015 (67.8)	126 (7.4)
1	1,473 (289.9)	0 (0)	1	1,064 (71.1)	184 (10.7)
2	1,473 (289.9)	0 (0)	2	1,015 (67.8)	73 (4.3)
3	1,473 (289.9)	0 (0)	3	1,015 (67.8)	135 (7.9)
4	1,473 (289.9)	0 (0)	4	1,064 (71.1)	194 (11.3)
5	1,473 (289.9)	0 (0)	5	964 (64.4)	66 (3.9)
6	1,473 (289.9)	0 (0)	6	1,003 (67.0)	117 (6.8)
8 a	1 (-0.2)	0 (0)	8 a	754 (48.6)	70 (4.1)
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)		ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)	
PROP. ACTION	1,473 (289.9)	0 (0)	PROP. ACTION	1,017 (67.9)	129 (7.4)
1	1,473 (289.9)	0 (0)	1	1,066 (71.2)	185 (10.8)
2	1,473 (289.9)	0 (0)	2	1,017 (67.9)	73 (4.3)
3	1,473 (289.9)	0 (0)	3	1,017 (67.9)	136 (7.9)
4	1,473 (289.9)	0 (0)	4	1,066 (71.2)	195 (11.4)
5	1,473 (289.9)	0 (0)	5	966 (64.5)	67 (3.9)
6	1,473 (289.9)	0 (0)	6	1,005 (67.1)	118 (6.9)
8	2 (-0.4)	0 (0)	8	756 (48.7)	71 (4.1)

3733

Table 4.3.2.4-1. (page 2 of 3)

NEVADA/UTAH				
TOTAL HOUSING REQUIREMENTS (IN TOTAL UNITS)				
NYE COUNTY, NV.				
ALTER-NATIVE	PEAK YEAR		LONG TERM	
	M-X INDUCED CHANGE (% above normal growth baseline)			
PROP. ACTION	2,151	(49.4)	0	(0)
1	2,151	(49.4)	0	(0)
2	2,151	(49.4)	0	(0)
3	2,164	(49.7)	2	(0)
4	2,171	(49.4)	0	(0)
5	2,164	(49.7)	2	(0)
6	2,151	(49.4)	0	(0)
8	1,140	(27.3)	0	(0)
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)			
PROP. ACTION	2,153	(49.4)	0	(0)
1	2,153	(49.4)	0	(0)
2	2,153	(49.4)	0	(0)
3	2,166	(49.7)	4	(0.04)
4	2,153	(49.4)	0	(0)
5	2,166	(49.7)	4	(0.04)
6	2,153	(49.4)	0	(0)
8	1,143	(27.3)	0	(0)
WHITE PINE COUNTY, NV.				
ALTER-NATIVE	PEAK YEAR		LONG TERM	
	M-X INDUCED CHANGE (% above normal growth baseline)			
PROP. ACTION	1,508	(47.6)	0	(0)
1	1,508	(47.6)	0	(0)
2	1,508	(47.6)	0	(0)
3	5,141	(159.1)	1,583	(43.0)
4	1,508	(47.6)	0	(0)
5	5,141	(159.1)	1,583	(43.0)
6	1,508	(47.6)	0	(0)
8	21	(0.7)	0	(0)
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)			
PROP. ACTION	3,599	(113.6)	0	(0)
1	3,599	(113.6)	0	(0)
2	3,599	(113.6)	0	(0)
3	7,748	(239.8)	3,273	(88.9)
4	3,599	(113.6)	0	(0)
5	7,748	(239.8)	3,273	(88.9)
6	3,599	(113.6)	0	(0)
8	2,132	(67.3)	0	(0)
BEAVER COUNTY, UT.				
ALTER-NATIVE	PEAK YEAR		LONG TERM	
	M-X INDUCED CHANGE (% above normal growth baseline)			
PROP. ACTION	3,626	(199.4)	1,484	(76.4)
1	823	(45.7)	319	(16.4)
2	736	(40.8)	27	(1.4)
3	1,025	(56.9)	435	(22.4)
4	1,025	(56.9)	435	(22.4)
5	4,851	(272.6)	1,984	(102.1)
6	4,851	(272.6)	1,984	(102.1)
8a	840	(46.2)	0	(0)
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)			
PROP. ACTION	5,294	(291.2)	3,247	(167.1)
1	3,225	(179.0)	2,059	(105.9)
2	3,138	(174.1)	1,790	(92.1)
3	3,387	(187.9)	2,174	(111.9)
4	3,387	(187.9)	2,174	(111.9)
5	6,889	(387.2)	3,746	(192.8)
6	6,889	(387.2)	3,746	(192.8)
8	2,540	(139.7)	1,779	(91.6)
IRON COUNTY, UT.				
ALTER-NATIVE	PEAK YEAR		LONG TERM	
	M-X INDUCED CHANGE (% above normal growth baseline)			
PROP. ACTION	716	(10.5)	475	(6.2)
1	3,558	(53.2)	1,395	(18.1)
2	171	(2.6)	0	(0.0)
3	4,541	(71.2)	1,879	(24.4)
4	4,541	(71.2)	1,879	(24.4)
5	984	(14.0)	662	(8.6)
6	984	(14.0)	662	(8.6)
8a	143	(2.1)	0	(0)
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)			
PROP. ACTION	759	(11.1)	513	(6.7)
1	3,604	(53.9)	1,433	(18.6)
2	224	(3.4)	0	(0)
3	4,588	(71.9)	1,917	(24.9)
4	4,588	(71.9)	1,917	(24.9)
5	1,023	(14.6)	699	(9.1)
6	1,023	(14.6)	699	(9.1)
8	189	(2.8)	0	(0)

Table 4.3.2.4-1. (page 3 of 3)

NEVADA/UTAH TOTAL HOUSING REQUIREMENTS (IN TOTAL UNITS)				
JUAB COUNTY, UT.				
ALTER-NATIVE	PEAK YEAR		LONG TERM	
	M-X INDUCED CHANGE (% above normal growth baseline)			
PROP. ACTION	1,070	(43.4)	0	(0)
1	1,070	(43.4)	0	(0)
2	1,226	(49.7)	214	(7.7)
3	1,070	(43.4)	0	(0.0)
4	1,070	(43.4)	0	(0.0)
5	1,070	(43.4)	0	(0.0)
6	1,070	(43.4)	0	(0.0)
8 a	63	(2.6)	0	(0)
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)			
PROP. ACTION	1,833	(74.3)	0	(0)
1	1,833	(74.3)	0	(0)
2	1,988	(80.6)	477	(17.2)
3	1,833	(74.3)	265	(9.6)
4	1,833	(74.3)	265	(9.6)
5	1,833	(74.3)	265	(9.6)
6	1,833	(74.3)	265	(9.6)
8	322	(34.0)	0	(0)

MILLARD COUNTY, UT.				
ALTER-NATIVE	PEAK YEAR		LONG TERM	
	M-X INDUCED CHANGE (% above normal growth baseline)			
PROP. ACTION	1,287	(32.6)	26	(0.6)
1	1,270	(32.2)	0	(0.0)
2	4,818	(122.2)	1,522	(36.0)
3	1,270	(32.2)	0	(0.0)
4	1,270	(32.2)	0	(0.0)
5	1,303	(33.0)	42	(1.1)
6	1,303	(33.0)	42	(1.1)
8 a	1,295	(34.3)	0	(0)
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)			
PROP. ACTION	3,520	(89.2)	1,027	(24.3)
1	3,512	(89.0)	1,005	(23.8)
2	7,040	(178.5)	2,523	(59.7)
3	3,512	(89.0)	1,005	(23.8)
4	3,512	(89.0)	1,005	(23.8)
5	3,535	(89.6)	1,043	(24.7)
6	4,371	(110.8)	1,905	(45.0)
8	3,750	(99.3)	0	(0)

UTAH/SALT LAKE COUNTY, UT.				
ALTER-NATIVE	PEAK YEAR		LONG TERM	
	M-X INDUCED CHANGE (% above normal growth baseline)			
PROP. ACTION	3,509	(1.1)	0	(0)
1	3,450	(1.1)	0	(0)
2	3,768	(1.1)	0	(0)
3	3,901	(1.2)	0	(0)
4	3,613	(1.1)	0	(0)
5	3,993	(1.2)	0	(0)
6	3,711	(1.1)	0	(0)
8 a	0	(0)	0	(0)
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)			
PROP. ACTION	5,793	(1.8)	0	(0)
1	5,734	(1.7)	0	(0)
2	6,053	(1.8)	0	(0)
3	6,186	(1.9)	0	(0)
4	5,904	(1.8)	0	(0)
5	6,277	(1.9)	0	(0)
6	5,995	(1.8)	0	(0)
8	0	(0)	0	(0)

WASHINGTON COUNTY, UT.				
ALTER-NATIVE	PEAK YEAR		LONG TERM	
	M-X INDUCED CHANGE (% above normal growth baseline)			
PROP. ACTION	240	(2.6)	75	(0.7)
1	478	(5.1)	319	(3.0)
2	51	(0.6)	0	(0)
3	665	(6.9)	421	(3.9)
4	684	(7.1)	441	(4.1)
5	356	(4.0)	100	(0.9)
6	359	(4.0)	121	(1.1)
8	3	(0)	0	(0)
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)			
PROP. ACTION	240	(2.6)	75	(0.7)
1	478	(5.1)	319	(3.0)
2	51	(0.6)	0	(0)
3	665	(6.9)	421	(3.9)
4	684	(7.1)	441	(4.1)
5	356	(4.0)	100	(0.9)
6	359	(4.0)	121	(1.1)
8	0	(0)	0	(0)

Housing--Proposed Action

the long-term housing requirements, or 1,140 units, and Utah will have 64 percent, or 2,060 units. This is largely because the base in Nevada is located in Clark County which has much larger resident labor force and thus less need for in-migrants, than is the case for Beaver County in Utah.

Counties Affected by the Base Locations

Under the Proposed Action, the base counties of Clark and Beaver will experience the largest absolute housing needs, and in the case of Beaver one of the most pronounced impacts. Indeed, Clark County's peak housing needs account for 59 percent of Nevada's and 35 percent of the deployment region's total. Beaver County will account for 36 percent of Utah's and 18 percent of the deployment region's peak-year housing requirements. Clark County's housing needs are projected to peak at 6,860 units, representing a 3.3 percent increase over the normal growth baseline, while the cumulative impact of M-X and other projects will mean a 3.5 percent increase. Although these increases appear small, M-X's share of the additional housing requirements over the construction period amount to some 32.4 percent, falling to 31.8 percent when other projects are accounted for. The other base county, Beaver in Utah, will be more severely impacted, with a peak-year housing need projected at 3,630 units, nearly 200 percent over baseline. Moreover, M-X requirements will be almost 27 times as great as the 135 additional units needed to accommodate normal growth. With the presence of other projects, the cumulative impact will be equivalent to about 30 times the normal growth needs. Clearly, Beaver County's building and mobile home industry, along with its financial institutions, will be hard pressed to meet these housing needs without considerable outside assistance.

After 1986 Clark and Beaver Counties' housing requirements fall off to reach a long term need for just over 1,000 units in Clark and nearly 1,500 units in Beaver County, representing increases over baseline of 0.4 percent and 76.4 percent respectively. With other projects, the cumulative impact is virtually the same for Clark but a much larger 167 percent for Beaver County. By 1994, Clark County's M-X related housing heads will constitute 89 percent of Nevada's and 31 percent of the total deployment region's housing requirements. Beaver County similarly will account for 70 percent of Utah's and 46 percent of the deployment region's M-X related housing needs. The impact of the large surpluses of housing units in Beaver County will be mitigated to a large extent by the fact that they will be largely mobile homes.

The other counties that are projected to experience permanent long-term housing impacts are those that are adjacent to the two base counties and that are projected to experience spillover effects from either procurement expenditures or from direct and indirect workers residing in them. In Nevada, Lincoln County falls into this category with a peak year need for just over 1,000 units, representing a 67.8 percent increase over baseline. M-X's share of the additional housing required over the construction period is over 7 times as large as the baseline share, making a significant impact. Lincoln County's permanent need is for only 130 units, or just 7.4 percent above baseline. Iron and Millard counties in Utah similarly will experience small permanent impacts due to spillover from Milford, although the peak-year M-X-related housing needs are expected to be equal to, and 5 times greater than, the normal growth requirements, respectively. Washington County, Utah is projected to also experience spill-over effects from Coyote Spring, although

Housing--Proposed Action

the number of units is small. Of these other permanently affected counties, Millard, is projected to be additionally impacted by the presence of other projects. M-X alone has a peak year requirement of 1,290 units, some 33 percent above baseline, but the cumulative impact when other projects are added raises the figure to 89 percent over baseline. Moreover, whereas M-X's permanent needs are small, only 73 units, the cumulative impact is large, 1,030 units or 24 percent over normal baseline growth. The impact of the large surpluses of housing units after the "bust" cycle in all of these counties will be mitigated to a considerable extent by the fact that the surpluses are confined predominantly to mobile homes.

Counties Affected by Other DDA Activities

All other counties in the deployment region are projected to experience only short-lived impacts because of construction activity involving the protective structures and the associated indirect workers' needs. Although short-lived, the impacts could, nonetheless, be very significant. In Nevada, for example, Eureka, Nye and White Pine counties, in declining order of relative M-X related housing unit needs, would require 1,470, 2,150, and 1,500 housing units, all of which are mobile homes, by their respective peak years. This will represent increases over baseline of 290, 49, and 48, percent respectively. Moreover, when M-X's share of additional housing needs over the construction period are compared to the normal growth needs over the same period, M-X will require 31, 4, and 15 times as much housing for Eureka, Nye, and White Pine counties. When other projects are taken into account, White Pine County's situation is all the more exacerbated. In Utah, the short-term temporary housing needs, again all mobile homes, are found in Juab, Salt Lake, and Utah counties. Juab's M-X requirements will be 43 percent greater than the baseline needs in the peak year, something that is further compounded by other projects resulting in a cumulative increase over baseline of 74 percent. Salt Lake and Utah counties' requirements, while absolutely large, 3,500 units, are nevertheless relatively minor, representing only a one percent increase over the baseline in the peak year, although, again, M-X's share of the additional housing needs up to the peak year are expected to be 27 percent of the total.

Due to the rapidity of the M-X-created boom-bust cycle in these counties, with the exception of Salt Lake, Utah, extensive outside help will still be necessary, even though all the units required are likely to be movable mobile homes.

Mitigative Measures

Temporary facilities and services should be utilized for the construction phase whenever possible. Permanent housing and facilities should be provided only for the level of housing requirements expected after the project is built. Mobile homes should not be denounced, but accepted as the logical way to provide temporary housing. One alternative might be the temporary new town, utilizing leased land to develop a planned community of mobile homes. Following construction the surplus homes and facilities could be converted to alternative uses, including conversion to low cost retirement communities or sale of the units for second-home or recreation uses. Land for residential development needs to be identified, properly zoned, and acquired in advance of development. Builders and developers already active in the area need to be reasonably certain of the timing and certainty of housing requirements and some may need financial incentives to expand. Outside mortgage financing will probably be needed with guarantees to lenders to offset the high risk

associated with boom-town uncertainties. State housing authorities could be set up with the power to sell bonds to obtain money for impact housing financing, and various federal housing and planning programs could be used for technical and financial assistance. Infrastructure investment strategies should be coordinated, and the land use controls to be considered include: zoning ordinances, planned unit development, sub-division controls, mobile home park standards, growth zones and boundaries, and service areas for water and sewer infrastructure.

ALTERNATIVE 1 (4.3.2.4.3)

Under this alternative, the DDA facilities remain the same as in the Proposed Action, the Coyote Spring Valley first operating base remains, but the other operating base is shifted from Milford to Beryl. There are no significant differences between the Proposed Action and Alternative 1 at the regional and state levels, the only significant differences occurring at the individual county level, particularly Beaver, Iron, and Washington counties in Utah. Since the second operating base is no longer near Milford, the degree of impact in Beaver County is diminished somewhat, with M-X-related housing requirements peaking at 820 units or 46 percent above the normal growth baseline compared to nearly 200 percent above under the Proposed Action. Similarly, the long-term impacts in Beaver County are reduced to 320 units, a 16 percent increase over baseline. The absence of a base likewise reduces the cumulative impacts of M-X and other projects in Beaver County. Even without the base at Milford, the M-X-related additional housing requirements are 7 times those of the normal baseline growth needs, largely because of spillover effects from Iron County which also account for the still permanent long-term impacts.

With the second operating base shifted to Beryl, Iron County's M-X-related peak housing requirements are almost 5 times larger at 3,560 units, representing a 53 percent increase over baseline. Similarly, the long-term effects are 3 times as large as under the Proposed Action. The only other county to be affected differently than under the Proposed Action is Washington County, which now will have about twice the peak year requirements. Although this will represent only a 5.1 percent increase over the normal growth requirements in the peak year, M-X still accounts for some 65 percent of additional housing needs over the 1985-1988 construction period.

ALTERNATIVE 2 (4.3.2.4.4)

Under this alternative the DDA facilities remain as they were under the Proposed Action, the Coyote Spring Valley first operating base remains the same, but the second operating base is moved from Milford to Delta in Millard County. Since only the base and associated spillover effects are different, there are no significant differences between Alternative 2 and the Proposed Action at the deployment region level or the state level, but only at the individual county level, particularly Beaver, Iron, Juab, Millard, and Washington counties in Utah. Beaver County's M-X-related peak housing requirements drop to only 20 percent of those under the Proposed Action, but they still represent almost a 40 percent increase over the normal growth baseline. A greater difference is seen in the long-term, where Beaver County's permanent housing requirements are only 2 percent of those under the Proposed Action. The cumulative impact of M-X and other projects is also reduced, although not to the same degree. Iron County's housing requirements

Housing--Alternative 3

are now substantially lower, by about 76 percent and there are no permanent long-term housing requirements expected. Juab County's peak year requirements are somewhat larger than under the Proposed Action, and it now is projected to have permanent long-term housing requirements, totaling some 210 units, at nearly 8 percent above the normal growth baseline, due to spillover effects from Millard County. Washington County, now further removed from the Utah base, has much lower and short-term housing requirements amounting to only 0.6 percent over the baseline requirements. The big difference at the county level is in Millard County where the base now increases housing unit requirements to a peak level of 4,800 units, some 122 percent over baseline and about 3.7 times greater than under the Proposed Action. M-X housing requirements are now about 8.5 times those of the normal growth baseline's over 1983-1988 period. Long-term requirements are similarly raised. When the base is Delta, the cumulative impacts of M-X and other projects are now estimated to be nearly 180 percent greater than the baseline requirements; and over the construction period will require almost 12 times the housing need for normal growth.

ALTERNATIVE 3 (4.3.2.4.5)

Under Alternative 3 the DDA facilities remain the same as under the Proposed Action, but the two operating base locations change, moving from Coyote Spring Valley and Milford to Beryl in Iron County, Utah, and to Ely in White Pine County, Nevada. As a result, although there are no significant differences at the regional level, the balance of M-X-related housing requirements does change a little at the state level. Now there is a 45 to 55 percent split between Nevada and Utah, compared to essentially an even split under the Proposed Action. The really significant differences occur at the individual county level, however, particularly in Clark and White Pine counties in Nevada, and Iron, and Washington counties in Utah.

In Clark County, the peak housing unit requirements are reduced to only 3 percent of those under the Proposed Action, and with no long-term impacts they make a trivial impact. White Pine County's peak requirements, on the other hand, are over 3 times as great, amounting to a 159 percent increase over baseline, and, moreover, there are permanent effects totalling some 1,600 units, an increase of 43 percent over baseline. Now White Pine's M-X-related housing requirements are 25 times those of the normal growth baseline's over the construction period. When other projects are included, the cumulative impact is very large, amounting to a 240 percent increase over baseline requirements in the peak year, and making the cumulative needs of M-X and other projects some 39 times greater than those of the normal growth baseline's over the 1983-87 construction period.

In Iron County, now that the first operating base is located near Beryl, M-X's peak year housing requirements reach approximately 4,500 units, a 71 percent increase over baseline, and over 6 times more than were needed under the Proposed Action. Over the construction period, M-X's housing requirements are also over 6 times those of the normal baseline requirements, compared to about equal proportions under the Proposed Action. The long-term needs are also greater, totalling some 1,880 units or 24 percent over the normal baseline. Washington County's peak year requirements are also larger, by almost a factor of 3, than the Proposed Action needs in Washington County, representing a 7 percent increase over baseline requirements. Long-term impacts are also greater due to spillover effects from Iron County.

ALTERNATIVE 4 (4.3.2.4.6)

Under Alternative 4, while the DDA facilities remain essentially the same as under the Proposed Action, the two operating base locations are different; the first operating base having been moved from Coyote Spring Valley to Beryl in Iron County, and the second operating base from Milford to Coyote Spring in Clark County. As a result, the balance of housing requirements at the state level does change a little, from an even split between Nevada and Utah to a 47 and 53 percent split. The significant differences, though, are again at the county level, with Clark County in Nevada, and Beaver, Iron, and Washington counties in Utah being affected.

Clark County's peak housing unit requirements are now projected to be only 70 percent of those under the Proposed Action, representing a 2.3 percent increase over baseline. The long-term and cumulative impacts are reduced similarly. The impacts in Beaver County will now be considerably less than under the Proposed Action with less than one-third of the housing unit requirements in the peak-year, and also over the long term. Even so the impacts are significant, with the peak-years' cumulative housing requirements being some 57 percent over the normal growth baseline needs, and the long-term needs being 22 percent over those for the baseline. Over the 1982-1986 construction period M-X will require over 6 times the amount of housing as would be needed to meet the normal growth baseline needs; when other projects are taken into account the cumulative requirements will be 21 times as great as the baseline needs over this same period.

Iron County's peak year housing requirements with the first operating base will be some 6 times those under the Proposed Action, reaching a peak-year requirement of 4,540 units or 71 percent above the baseline needs of the peak-year. Its long-term requirements will be about 1,880 units or 24 percent above baseline. Over the construction period, M-X will require over 6 times the quantity of housing that the normal growth baseline would require. Washington County is the last to be affected, with its peak year housing requirements totalling some 680 units, 7 percent more than the baseline requirements of that year. This represents an increase of 185 percent over the Proposed Action requirements. Its long-term needs are also greater than under the Proposed Action, by a factor of 5.9.

ALTERNATIVE 5 (4.3.2.4.7)

Under Alternative 5 the DDA facilities remain essentially the same as under the Proposed Action and as a result there are no significant differences at the regional level. However, with the first operating base shifted from Coyote Spring Valley to Milford in Beaver County, and the second operating base changed from Milford to Ely in White Pine County, the balance of peak-year housing requirements at the state level does change, from an even split between Nevada and Utah to a 45 to 55 percent split. The significant differences, though, are at the county level, with Clark and White Pine counties in Nevada, and Beaver, Iron, and Washington counties in Utah being principally affected.

With the first operating base no longer in Clark County, its peak housing requirements are only 3 percent of those under the proposed alternative, moreover, there are no permanent effects in Clark County. With the second operating base now near Ely, White Pine County's peak-year housing requirements are now

240 percent above those for the Proposed Action, with a need for 5,140 units, representing an increase of 159 percent over the baseline requirements in the peak year. Moreover, White Pine now has permanent, long-term housing requirements of nearly 1,600 units, some 43 percent the baseline needs. Indicative of the degree of impact is the fact that over the construction period, M-X will require 25 times as many housing units as are projected to be needed to accommodate normal growth over the same period. With other projects this increases to 38 times the normal growth requirements.

With OB I at Milford, the peak year long-term requirements are 34 percent higher in Beaver County than under the Proposed Action with Base II at Milford. Iron County is still expected to get spillover effects from Beaver County with somewhat higher requirements than under the Proposed Action. Washington County's peak-year requirements are 48 percent higher than under the Proposed Action.

ALTERNATIVE 6 (4.3.2.4.8)

Under Alternative 6 the DDA facilities remain essentially the same as under the Proposed Action and as a result at the regional level there are no significant differences. However, with the operating bases now switched, the balance of peak year housing requirements at the state level is now 47 percent in Nevada, 53 percent in Utah. The significant differences occur at the county level, however, with Clark County in Nevada, and Beaver, and Washington counties in Utah being affected.

With the second operating base in Clark instead of the first, Clark County's peak year housing requirements drop to 70 percent of the Proposed Action, with a similar drop in the long term so that now the peak year requirements are only 2 percent above the normal growth baseline. Beaver County's peak year requirements are 34 percent higher, as are its long-term needs. This will increase the degree of impact as is illustrated by the fact that M-X will now require 28 times as many housing units as would normally be required without M-X. Other projects increase this figure to 39 times the normal growth requirements. Clearly the local building industry will need considerable outside help. Similarly, Washington County's spillover effects from Coyote Spring Valley, increases its peak-housing requirements by 50 percent, although because of a shift in timing M-X's housing requirements are only 28 percent of the trend growth baseline's needs, compared to 50 percent under the Proposed Action over the construction period.

ALTERNATIVE 7 (4.3.2.4.9)

The housing requirements impact is caused by the decision to deploy the M-X system in Texas/New Mexico, with operating bases near Clovis and Dalhart, and the resultant demand for direct and indirect labor. Since the regional and local labor markets are not sufficiently large to provide all of the necessary labor, the balance is met by in-migrants all of whom need to be housed. The brunt of the absolute housing requirements, particularly the long-term ones will be felt in the two operating base counties and in a few adjacent counties affected by spillover. Major, albeit short-lived impacts will be felt to varying degrees, throughout the deployment region counties as construction of the DDA facilities proceeds, peaks and culminates.

The peak-year housing requirements for the Texas/New Mexico deployment region reaches a total of some 23,240 units, representing an increase of 9 percent over the normal growth baseline for the Texas/New Mexico deployment region. This contrasts with a peak requirement of 20,000 units for the Proposed Action in Nevada/Utah which represents only a 3.5 percent increase over the baseline. Likewise the long-term impacts of M-X are somewhat greater in Texas/New Mexico than in Nevada/Utah under the Proposed Action. For example, over the 1982 to 1987 construction period, the normal growth baseline's housing requirements in Texas/New Mexico are expected to total some 12,560 additional units, whereas over the same period, M-X will require an additional 22,080 units, or 1.75 times as many. This contrasts with only 23 percent as many M-X units as are required for normal baseline growth in Nevada/Utah with the Proposed Action. Alternative 7 has a 65 to 35 percent split in housing requirements in the peak year between Texas and New Mexico.

Among the permanently impacted counties, in order of the severity of impact, are Hartley, Dallam, Moore, Potter-Randall and Lubbock counties in Texas, and Curry and Roosevelt counties in New Mexico. Hartley County, for example has a peak year housing requirement of 2,250 units, representing a 171 percent increase over baseline for that year. But, over the construction period, M-X will require almost 22 times the amount of housing that the normal baseline growth will require. Its long-term requirements exceed those of the normal baseline by 58 percent. Adjoining Dallam County will also experience large peak year and long-term housing needs. For example, its construction period needs for M-X are 19 times those of the baselines over the same period. Moore County, also adjacent to the base county, will experience spillover effects requiring almost 11 times as much housing as would normally be anticipated with normal growth. Lubbock and Potter-Randall counties also have large absolute numbers of peak years M-X housing requirements due to procurement expenditures and indirect workers, but their housing markets are relatively large and thus in a better position to absorb the M-X requirements. Nevertheless, M-X's housing needs over the construction period will just exceed those of the normal growth's needs over the same period in Potter-Randall counties, for example. Table 4.3.2.4-2 presents estimates of housing requirements by county for Texas/New Mexico.

Curry County, New Mexico, will be the most severely impacted. Its peak year housing requirements will total some 6,130 units, representing a 40 percent increase over baseline. Moreover, over the four year construction period M-X's housing requirements are expected to be 34 times as great as those needed to accommodate normal growth needs in the same period. Curry's long-term housing needs due to M-X total some 2,130 units representing a 14 percent increase over baseline. Roosevelt County, adjacent to Curry County, will also experience significant peak year impacts with M-X's housing requirements over the construction period exceeding those of the normal growth baseline's by a factor of 8.

All other counties in the Texas/New Mexico deployment region are projected to experience only short lived impacts due to short-term construction activity. However, although the impacts are short lived they are nevertheless significant; particularly in Parmer, Bailey, Sherman, and Deaf Smith counties in Texas, in descending order of impact; and in Quay, Harding, and Chaves counties in New Mexico, in descending order of magnitude. For example, Parmer County has a peak year housing requirement of 640 units, some 19 percent above the baseline housing

Table 4.3.2.4-2. (page 1 of 3)

TEXAS/NEW MEXICO TOTAL HOUSING REQUIREMENTS					
(IN TOTAL UNITS)					
DEPLOYMENT REGION			BAILEY COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM	ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)			M-X INDUCED CHANGE (% above normal growth baseline)	
7	23,136	(0.0)	7	537	(18.7)
8	12,762	(4.9)	8	193	(6.7)
CASTRO COUNTY, TX.			COCHRAN COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM	ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)			M-X INDUCED CHANGE (% above normal growth baseline)	
7	142	(4.5)	7	47	(2.8)
8	82	(2.7)	8	42	(2.5)
DALLAM COUNTY, TX.			DEAF SMITH, COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM	ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)			M-X INDUCED CHANGE (% above normal growth baseline)	
7	3,229	(106.0)	7	1,039	(15.7)
8	745	(26.3)	8	534	(8.2)
HALE COUNTY, TX.			HARTLEY COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM	ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)			M-X INDUCED CHANGE (% above normal growth baseline)	
7	225	(1.6)	7	2,518	(171.1)
8	47	(0.3)	8	626	(41.7)

3734

Table 4.3.2.4-2. (page 2 of 3)

**TEXAS/NEW MEXICO
TOTAL HOUSING REQUIREMENTS**

(IN TOTAL UNITS)

HOCKLEY COUNTY, TX.

ALTER-NATIVE	PEAK YEAR		LONG TERM	
	M-X INDUCED CHANGE (% above normal growth baseline)			
7	156	(2.1)	0	(0)
8	78	(1.0)	0	(0)

LAMB COUNTY, TX.

ALTER-NATIVE	PEAK YEAR		LONG TERM	
	M-X INDUCED CHANGE (% above normal growth baseline)			
7	80	(1.3)	0	(0)
8	65	(1.0)	0	(0)

LUBBOCK COUNTY, TX.

ALTER-NATIVE	PEAK YEAR		LONG TERM	
	M-X INDUCED CHANGE (% above normal growth baseline)			
7	2,329	(2.5)	0	(0)
8	1,397	(1.7)	0	(0)

MOORE COUNTY, TX.

ALTER-NATIVE	PEAK YEAR		LONG TERM	
	M-X INDUCED CHANGE (% above normal growth baseline)			
7	1,109	(21.2)	0	(0)
8	82	(1.6)	0	(0)

OLDHAM COUNTY, TX.

ALTER-NATIVE	PEAK YEAR		LONG TERM	
	M-X INDUCED CHANGE (% above normal growth baseline)			
7	54	(6.2)	0	(0)
8	23	(2.7)	0	(0)

PARMER COUNTY, TX.

ALTER-NATIVE	PEAK YEAR		LONG TERM	
	M-X INDUCED CHANGE (% above normal growth baseline)			
7	644	(18.8)	0	(0)
8	17	(0.5)	0	(0)

POTTER/RANDALL COUNTIES, TX.

ALTER-NATIVE	PEAK YEAR		LONG TERM	
	M-X INDUCED CHANGE (% above normal growth baseline)			
7	4,954	(7.4)	997	(1.4)
8	1,415	(2.1)	80	(0.1)

SHERMAN COUNTY, TX.

ALTER-NATIVE	PEAK YEAR		LONG TERM	
	M-X INDUCED CHANGE (% above normal growth baseline)			
7	263	(18.8)	0	(0)
8	0	(0)	0	(0)

Table 4.3.2.4-2. (page 3 of 3)

TEXAS/NEW MEXICO					
TOTAL HOUSING REQUIREMENTS					
(IN TOTAL UNITS)					
SWISHER COUNTY, TX.			CHAVES COUNTY, NM.		
ALTERNATIVE	PEAK YEAR	LONG TERM	ALTERNATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)			M-X INDUCED CHANGE (% above normal growth baseline)	
7	51	(1.3)	7	1,292	(6.3)
8	26	(0.7)	8	1,089	(5.1)
CURRY COUNTY, NM.			DE BACA COUNTY, NM.		
ALTERNATIVE	PEAK YEAR	LONG TERM	ALTERNATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)			M-X INDUCED CHANGE (% above normal growth baseline)	
7	6,125	(39.4)	7	45	(4.1)
8	5,556	(36.2)	8	45	(4.3)
HARDING COUNTY, NM.			QUAY COUNTY, NM.		
ALTERNATIVE	PEAK YEAR	LONG TERM	ALTERNATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)			M-X INDUCED CHANGE (% above normal growth baseline)	
7	1,264	(323.1)	7	1,129	(25.1)
8	1,191	(278.3)	8	1,042	(23.2)
ROOSEVELT COUNTY, NM.			UNION COUNTY, NM.		
ALTERNATIVE	PEAK YEAR	LONG TERM	ALTERNATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)			M-X INDUCED CHANGE (% above normal growth baseline)	
7	1,437	(22.8)	7	62	(3.2)
8	1,258	(20.1)	8	0	(0)

3734

needs in that year. But M-X's share of the additional housing required is over 200 times that required to accommodate normal growth baseline's requirements over the construction period. For Quay County, this figure is 70 times the baseline requirements; for Bailey 27 times; Sherman 9 times; Deaf Smith 4 times; Harding 53 times; and Chaves 2 times.

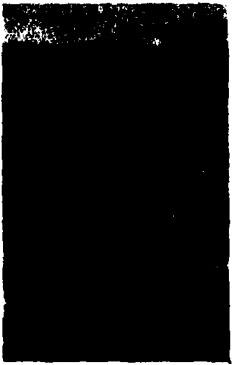
ALTERNATIVE 8 (4.3.2.4.10)

With this split deployment alternative the Nevada/Utah deployment regions peak year housing requirements are only about 40 percent of those under the Proposed Action full deployment in Nevada/Utah, with a similar reduction over the long-term. Moreover, the split between Nevada and Utah of the peak year housing requirements differs from the split under the Proposed Action, with Nevada having 76 percent and Utah only 24 percent. Over the long-term, Nevada's share increases to 100 percent, with Utah not experiencing any permanent effects. Significant differences between the Nevada/Utah region and the Proposed Action occur in Clark, Eureka, Nye and White Pine counties in Nevada, and in Beaver, Iron, Juab, Salt Lake/Utah and Washington counties in Utah. Clark County's peak year housing requirements are 65 percent of those under the Proposed Action, although the long-term impacts are the same. Nye County's peak year needs are almost halved, while Eureka and White Pine counties are projected to experience insignificant housing impacts. In Utah, Beaver, Iron and Juab county's peak year housing needs are substantially reduced, to only 23, 20 and 6 percent of the Proposed Action's requirements respectively. No impacts are expected in Salt Lake/Utah or Washington counties, compared to small impacts under the Proposed Action.

Under this split deployment alternative, the peak year housing requirements reach some 12,760 units representing a 5 percent increase over the normal growth baseline in Texas/New Mexico. This requirement is only 55 percent of the full deployment peak year requirements in Texas/New Mexico. Curry County will be the most severely impacted, with its peak year housing requirements totalling 5,560 units, or 36 percent over the normal growth baseline needs. M-X's share of the additional housing units needed over the construction period, however, are almost 30 times those that are needed to satisfy the projected normal growth baseline's requirements. Its long-term needs are also considerable, about 13 percent over the baseline requirements in 1994. Three other counties are projected to experience long-term impacts, Roosevelt County, with its M-X construction period needs being 9 times as large as those for normal growth, and Potter and Randall counties where the impacts are not significant.

Of all the counties experiencing short-lived construction work impacts, only Bailey, Dallam, Hartley, and Deaf Smith counties in Texas in descending order of significance, and Harding County in New Mexico will have major impacts. Bailey County's peak-year housing requirements only total some 190 units, but over the construction period these 190 units are over 9 times as many that are projected to be needed with normal growth. A similar relationship holds for Dallam County. Harding County in New Mexico also has M-X-related peak-year requirements of 1,090 housing units, representing a 280 percent increase over the normal growth baseline requirements in the peak year.

Public Finance



PUBLIC FINANCE

INTRODUCTION (4.3.2.5.1)

This section discusses the aggregate net fiscal effects of all local government units in the deployment area (peak year and long-term effects) due to M-X. Aggregate capital expenditure requirements for peak year and long-term effects are also presented. Tables delineating these effects are presented in this section. Detailed estimates by major expenditure category and revenue sources are available in supplemental technical reports.

The analysis employs a per capita rate technique based upon aggregate per capita rates, reflecting total expenditures and revenues of all jurisdictions (county, cities, school districts, special districts) within a county area. As such, the estimates presented cannot be construed as individual jurisdiction requirements. The calculated level of anticipated revenues, expenditures, and the resultant net effects assume that the existing local tax rate and structure within each county area remains constant throughout the period of analysis. State and federal assistance to local school districts are included in the analysis. State and federal grants-in-aid, federal revenue sharing monies, and in-lieu taxes will not be available to the local jurisdictions. Debt service requirements associated with the estimated level of capital expenditures required have also not been included as an operations related expenditure item, as federal aid is anticipated for infrastructure development.

PROPOSED ACTION (4.3.2.5.2)

In all cases the effects of the Proposed Action stem from population in-migration into the region. Though both revenues and expenditures are anticipated to rise to peak levels during the 1986-1989 period and drop to near steady state levels by 1994, the anticipated surplus/deficits are the critical issues which will significantly affect public service levels in the affected county areas. These effects have been estimated for M-X induced population in-migration. The effects of other projects in the area, however, are uncertain with respect to their net effects but have been incorporated into the baseline estimates of the potentially affected county areas.

In the deployment area as a whole (low baseline scenario), deficits of approximately \$13.9 million are anticipated in the peak year, 1986 (Table 4.3.2.5-1). Though this effect is insignificant with respect to the total level of expenditures anticipated at this time, local effects are more serious. In the Eureka County area, peak year deficits (1987) of \$1.5 million are estimated, representing 20.1 percent of the total expenditures anticipated. Significant degradation of service levels in the area would be anticipated if mitigative measures and/or outside financial aid are not available in a timely fashion. Similar effects of varying degrees are experienced in the other county areas proposed for technical facility construction. The White Pine, Nye, and Juab county areas will experience no long-term growth due to M-X yet will experience peak deficits ranging from approximately \$800,000 in the Juab County area to \$1.6 million in both the White Pine and Nye county areas.

County areas proposed for operating bases will experience similar effects. Peak year effects in the Clark County (1985) area are estimated at deficits of approximately \$3.8 million, representing only 0.6 percent of the total expenditures anticipated at this time. In the Beaver County area, peak year deficits (1986) of \$1.9 million are anticipated. Substantial outside aid would be necessary if service levels in these areas are not to deteriorate.

Aggregate capital expenditure requirements in the Nevada/Utah deployment region are presented in Table 4.3.2.5-2. Capital outlays necessary to support long-term infrastructure demand (public buildings, streets, schools, health care facilities, water and wastewater systems), within the region as a whole, are approximately \$58.4 million. Peak year demands would result in a total of \$218.2 million. Though peak year requirements could be reduced substantially by temporary facilities and/or other mitigative actions, county areas potentially affected do not have the capability to raise the monies necessary to support these levels of infrastructure development.

On the local level, long-term capital expenditure requirements are necessary for the base and contiguous counties in which impacts of OB facility construction are experienced. The first operating base at Coyote Spring Valley (Clark County) and second operating base at Milford (Beaver County) will experience \$27.1 million and \$24.9 million in long-term capital expenditures, respectively. Operating base county impacts, therefore, represent 89 percent of total capital expenditure requirements in the Nevada/Utah deployment region in the long-term. The remaining effects are felt in the impacted counties of Lincoln, Nevada; Iron, Utah; Millard, Utah; and Washington, Utah.

Peak year capital expenditures will be necessary for counties where construction impacts of OB and DDA facilities are experienced. All counties in the Nevada/Utah deployment region are so affected. The first operating base at Coyote Spring Valley (Clark County) and the second operating base at Milford (Beaver County) will experience \$59.8 million and \$39.4 million in peak year capital expenditures respectively. This represents approximately 45 percent of total peak year requirements in the Nevada/Utah deployment region. Consequently, the cumulative impacts of the nonbase counties represents the majority of peak year

NEVADA/UTAH
LOCAL GOVERNMENT NET FISCAL EFFECTS

DEPLOYMENT REGION			
ALTER-NATIVE	PEAK YEAR	LONG TERM	
	M-X INDUCED CHANGE (Thousands of 1980 Dollars)		
PROP. ACTION	\$-13,908 (-0.8%)	\$170 (.01%)	
1	-13,899 (-0.8%)	101 (.01%)	
2	-13,859 (-0.8%)	233 (.01%)	
3	-11,987 (-0.7%)	-59 (-.01%)	
4	-13,668 (-0.8%)	-142 (-.01%)	
5	-11,492 (-0.7%)	-59 (-.01%)	
6	-11,666 (-0.8%)	-56 (-.01%)	
8	-6,216 (-0.4%)	+489 (.03%)	
ALTER-NATIVE	M-X PLUS OTHER PROJECT INDUCED CHANGE (Millions of 1980 Dollars)		
PROP. ACTION	-13.8 (-.7%)	0.1 (.01%)	
1	-13.8 (-0.7%)	0.1 (.01%)	
2	-13.8 (-0.7%)	0.2 (.01%)	
3	-11.3 (-0.7%)	-0.1 (-.01%)	
4	-13.8 (-0.7%)	-0.1 (-.01%)	
5	-11.3 (-0.6%)	0 (.00%)	
6	-13.8 (-0.7%)	-0.1 (-.01%)	
8	-6.2 (-0.4%)	0.5 (.03%)	

CLARK COUNTY, NV.			
ALTER-NATIVE	PEAK YEAR	LONG TERM	
	M-X INDUCED CHANGE (Thousands of 1980 Dollars)		
PROP. ACTION	\$-3,762 (-0.6%)	\$494 (-0.1%)	
1	-3,762 (-0.6%)	464 (-0.1%)	
2	-3,749 (-0.5%)	494 (-0.1%)	
3	-236 (-0.04%)	0 (.00%)	
4	-2,672 (-1.5%)	377 (-0.05%)	
5	-221 (-0.03%)	0 (.00%)	
6	-3,658 (-0.5%)	377 (-0.05%)	
8	-3,310 (-0.5%)	490 (-0.06%)	
ALTER-NATIVE	M-X PLUS OTHER PROJECT INDUCED CHANGE (Millions of 1980 Dollars)		
PROP. ACTION	-3.8 (-0.6%)	0.1 (.01%)	
1	-3.8 (-0.6%)	0.5 (.1%)	
2	-3.7 (-0.5%)	0.5 (.1%)	
3	-0.2 (-0.04%)	0 (.00%)	
4	-3.7 (-0.5%)	0.4 (.04%)	
5	-0.2 (-0.03%)	0 (.00%)	
6	-3.7 (-0.5%)	0.4 (.04%)	
8	-3.3 (-0.5%)	0.5 (.06%)	

EUREKA COUNTY, NV.			
ALTER-NATIVE	PEAK YEAR	LONG TERM	
	M-X INDUCED CHANGE (Thousands of 1980 Dollars)		
PROP. ACTION	-1,497 (-20.1%)	0. (0)	
1	-1,497 (-20.1%)	0. (0)	
2	-1,497 (-20.1%)	0. (0)	
3	-1,497 (-20.1%)	0. (0)	
4	-1,497 (-20.1%)	0. (0)	
5	-1,497 (-20.1%)	0. (0)	
6	-1,497 (-20.1%)	0. (0)	
8	0. (0)	0. (0)	
ALTER-NATIVE	M-X PLUS OTHER PROJECT INDUCED CHANGE (Millions of 1980 Dollars)		
PROP. ACTION	-1.5 (-20.1%)	0. (0)	
1	-1.5 (-20.1%)	0. (0)	
2	-1.5 (-20.1%)	0. (0)	
3	-1.5 (-20.1%)	0. (0)	
4	-1.5 (-20.1%)	0. (0)	
5	-1.5 (-20.1%)	0. (0)	
6	-1.5 (-20.1%)	0. (0)	
8	0. (0)	0. (0)	

LINCOLN COUNTY, NV.			
ALTER-NATIVE	PEAK YEAR	LONG TERM	
	M-X INDUCED CHANGE (Thousands of 1980 Dollars)		
PROP. ACTION	-636 (-5.4%)	0. (0)	
1	-644 (-7.2%)	0. (0)	
2	-636 (-7.2%)	0. (0)	
3	-636 (-7.2%)	0. (0)	
4	-644 (-7.2%)	0. (0)	
5	-628 (-7.5%)	0. (0)	
6	-636 (-7.5%)	0. (0)	
8	-476 (-7.8%)	0. (0)	
ALTER-NATIVE	M-X PLUS OTHER PROJECT INDUCED CHANGE (Millions of 1980 Dollars)		
PROP. ACTION	-0.6 (-5.5%)	0. (0)	
1	-0.6 (-7.2%)	0. (0)	
2	-0.6 (-7.2%)	0. (0)	
3	-0.6 (-7.2%)	0. (0)	
4	-0.6 (-7.2%)	0. (0)	
5	-0.6 (-7.5%)	0. (0)	
6	-0.6 (-7.5%)	0. (0)	
8	-0.5 (-7.8%)	0. (0)	

*Estimates reflect continued funding under various federal programs (see text for details).

(Page 2 of 3) Table 4.3.2.5-1

NEVADA/UTAH LOCAL GOVERNMENT NET FISCAL EFFECTS ¹					
JUAB COUNTY, UT.					
ALTER-NATIVE	PEAK YEAR		LONG TERM		
	MX INDUCED CHANGE (Thousands of 1980 Dollars)				
PROP. ACTION	-790	(-9.3%)	0.	(0)	
1	-790	(-9.3%)	0.	(0)	
2	-879	(-10.1%)	0.	(0)	
3	-790	(-9.3%)	0.	(0)	
4	-790	(-9.3%)	0.	(0)	
5	-790	(-9.3%)	0.	(0)	
6	-790	(-9.3%)	0.	(0)	
8	-62	(-1.0%)	0.	(0)	
ALTER-NATIVE	M-X PLUS OTHER PROJECT INDUCED CHANGE (Millions of 1980 Dollars)				
PROP. ACTION	-0.8	(-9.3%)	0.	(0)	
1	-0.8	(-9.3%)	0.	(0)	
2	-0.9	(-10.1%)	0.	(0)	
3	-0.8	(-9.3%)	0.	(0)	
4	-0.8	(-9.3%)	0.	(0)	
5	-0.8	(-9.3%)	0.	(0)	
6	-0.8	(-9.3%)	0.	(0)	
8	-0.1	(-1.0%)	0.	(0)	

MILLARD COUNTY, UT.					
ALTER-NATIVE	PEAK YEAR		LONG TERM		
	MX INDUCED CHANGE (Thousands of 1980 Dollars)				
PROP. ACTION	-869	(-5.4%)	0.	(0)	
1	-869	(-7.1%)	0.	(0)	
2	-2,190	(-8.8%)	-242	(-1.0%)	
3	-869	(-7.1%)	0.	(0)	
4	-869	(-7.1%)	0.	(0)	
5	-872	(-7.1%)	0.	(0)	
6	-872	(-7.1%)	0.	(0)	
8	-1,243	(-8.9%)	0.	(0)	
ALTER-NATIVE	M-X PLUS OTHER PROJECT INDUCED CHANGE (Millions of 1980 Dollars)				
PROP. ACTION	-0.9	(-5.4%)	0.	(0)	
1	-0.9	(-7.1%)	0.	(0)	
2	-2.2	(-8.8%)	-0.2	(-1.0%)	
3	-0.9	(-7.1%)	0.	(0)	
4	-0.9	(-7.1%)	0.	(0)	
5	-0.9	(-7.1%)	0.	(0)	
6	-0.9	(-7.1%)	0.	(0)	
8	-1.2	(-8.9%)	0.	(0)	

UTAH/SALT LAKE COUNTY, UT.					
ALTER-NATIVE	PEAK YEAR		LONG TERM		
	MX INDUCED CHANGE (Thousands of 1980 Dollars)				
PROP. ACTION	-2,970	(-0.4%)	0.	(0)	
1	-1,970	(-0.4%)	0.	(0)	
2	-3,105	(-0.4%)	0.	(0)	
3	-3,301	(-0.4%)	0.	(0)	
4	-3,301	(-0.4%)	0.	(0)	
5	-3,541	(-0.4%)	0.	(0)	
6	-3,395	(-0.4%)	0.	(0)	
8	0.	(0)	0.	(0)	
ALTER-NATIVE	M-X PLUS OTHER PROJECT INDUCED CHANGE (Millions of 1980 Dollars)				
PROP. ACTION	-2.9	(-0.4%)	0.	(0)	
1	-2.9	(-0.4%)	0.	(0)	
2	-3.1	(-0.4%)	0.	(0)	
3	-3.4	(-0.4%)	0.	(0)	
4	-3.3	(-0.4%)	0.	(0)	
5	-3.5	(-0.4%)	0.	(0)	
6	-3.4	(-0.4%)	0.	(0)	
8	0.	(0)	0.	(0)	

WASHINGTON COUNTY, UT.					
ALTER-NATIVE	PEAK YEAR		LONG TERM		
	MX INDUCED CHANGE (Thousands of 1980 Dollars)				
PROP. ACTION	-143	(-0.4%)	0.	(0)	
1	-260	(-1.2%)	0.	(0)	
2	-49	(-0.1%)	0.	(0)	
3	-222	(-0.8%)	-0.1	(-0.2%)	
4	-222	(-0.8%)	-0.1	(-0.2%)	
5	-145	(-0.4%)	0.	(0)	
6	-146	(-0.4%)	0.	(0)	
8	0.	(0)	0.	(0)	
ALTER-NATIVE	M-X PLUS OTHER PROJECT INDUCED CHANGE (Millions of 1980 Dollars)				
PROP. ACTION	-0.1	(-0.4%)	0.	(0)	
1	-0.3	(-1.2%)	0.	(0)	
2	0.	(0)	0.	(0)	
3	-0.2	(-0.8%)	-0.1	(-0.2%)	
4	-0.2	(-0.8%)	-0.1	(-0.2%)	
5	-0.1	(-0.4%)	0.	(0)	
6	-0.1	(-0.4%)	0.	(0)	
8	0.	(0)	0.	(0)	

¹Estimates reflect continued funding under various federal programs (see text for details).

Table 4.3.2.5-1

NEVADA/UTAH LOCAL GOVERNMENT NET FISCAL EFFECTS¹

NYE COUNTY, NV.				
ALTER-NATIVE	PEAK YEAR		LONG TERM	
	M-X INDUCED CHANGE (Thousands of 1980 Dollars)			
PROP. ACTION	-1,625	(-7.5%)	0.	(0)
1	-1,625	(-7.5%)	0.	(0)
2	-1,625	(-7.5%)	0.	(0)
3	-1,625	(-7.5%)	0.	(0)
4	-1,625	(-7.5%)	0.	(0)
5	-1,625	(-7.5%)	0.	(0)
6	-1,625	(-7.5%)	0.	(0)
8	-1,024	(-6.3%)	0.	(0)

M-X PLUS OTHER PROJECT INDUCED CHANGE (Millions of 1980 Dollars)				
ALTER-NATIVE	PEAK YEAR		LONG TERM	
	M-X INDUCED CHANGE (Thousands of 1980 Dollars)			
PROP. ACTION	-1.6	(-7.5%)	0.	(0)
1	-1.6	(-7.5%)	0.	(0)
2	-1.6	(-7.5%)	0.	(0)
3	-1.6	(-7.5%)	0.	(0)
4	-1.6	(-7.5%)	0.	(0)
5	-1.6	(-7.5%)	0.	(0)
6	-1.6	(-7.5%)	0.	(0)
8	-1.0	(-6.3%)	0.	(0)

WHITE PINE COUNTY, NV.				
ALTER-NATIVE	PEAK YEAR		LONG TERM	
	M-X INDUCED CHANGE (Thousands of 1980 Dollars)			
PROP. ACTION	-1,640	(-11.5%)	0	(0)
1	-1,640	(-11.5%)	..	(0)
2	-1,640	(-11.5%)	0.	(0)
3	-3,800	(-16.0%)	458	(2.5%)
4	-1,640	(-11.5%)	0.	(0)
5	-3,800	(-16.0%)	458	(2.5%)
6	-1,640	(-11.5%)	0.	(0)
8	-19	(-0.1%)	0.	(0)

M-X PLUS OTHER PROJECT INDUCED CHANGE (Millions of 1980 Dollars)				
ALTER-NATIVE	PEAK YEAR		LONG TERM	
	M-X INDUCED CHANGE (Thousands of 1980 Dollars)			
PROP. ACTION	-1.6	(-11.5%)	..	(0)
1	-1.6	(-11.5%)	..	(0)
2	-1.6	(-11.5%)	..	(0)
3	-3.7	(-16.0%)	458	(2.5%)
4	-1.6	(-11.5%)	..	(0)
5	-3.7	(-16.0%)	458	(2.5%)
6	-1.6	(-11.5%)	..	(0)
8	0.	(0)	..	(0)

BEAVER COUNTY, UT.				
ALTER-NATIVE	PEAK YEAR		LONG TERM	
	M-X INDUCED CHANGE (Thousands of 1980 Dollars)			
PROP. ACTION	-1,866	(-13.7%)	-0.2	(-1.4%)
1	-71	(-1.4%)	0.	(0)
2	-71	(-1.4%)	0.	(0)
3	-71	(-1.4%)	0.	(0)
4	-71	(-1.4%)	0.	(0)
5	-2,290	(-11.7%)	-295	(-1.7%)
6	-2,290	(-11.7%)	-295	(-1.7%)
8	-71	(-1.4%)	0.	(0)

M-X PLUS OTHER PROJECT INDUCED CHANGE (Millions of 1980 Dollars)				
ALTER-NATIVE	PEAK YEAR		LONG TERM	
	M-X INDUCED CHANGE (Thousands of 1980 Dollars)			
PROP. ACTION	-1.8	(-13.5%)	..	(0)
1	-1.7	(-12.4%)	..	(0)
2	-1.7	(-12.4%)	..	(0)
3	-1.7	(-12.4%)	..	(0)
4	-1.7	(-12.4%)	..	(0)
5	-2.3	(-11.7%)	-295	(-1.7%)
6	-2.3	(-11.7%)	-295	(-1.7%)
8	-0.7	(-9.2%)	..	(0)

IRON COUNTY, UT.				
ALTER-NATIVE	PEAK YEAR		LONG TERM	
	M-X INDUCED CHANGE (Thousands of 1980 Dollars)			
PROP. ACTION	-4,070	(-1.9%)	-77	(-0.4%)
1	-1,672	(-5.3%)	-304	(-0.4%)
2	-118	(-0.5%)	0.	(0)
3	-1,990	(-6.1%)	-397	(-1.1%)
4	-1,990	(-6.1%)	-397	(-1.1%)
5	-407	(-1.3%)	-110	(-0.4%)
6	-407	(-1.3%)	-110	(-0.4%)
8	-82	(-0.4%)	0.	(0)

M-X PLUS OTHER PROJECT INDUCED CHANGE (Millions of 1980 Dollars)				
ALTER-NATIVE	PEAK YEAR		LONG TERM	
	M-X INDUCED CHANGE (Thousands of 1980 Dollars)			
PROP. ACTION	-0.4	(-1.9%)	0.	(0)
1	-1.7	(-5.3%)	-0.3	(-0.4%)
2	-0.1	(-0.1%)	0.	(0)
3	-2..	(-6.1%)	-0.4	(-1.1%)
4	-2.6	(-6.1%)	-0.4	(-1.1%)
5	-0.4	(-1.9%)	-0.1	(-0.4%)
6	-0.4	(-1.9%)	-0.1	(-0.4%)
8	-0.1	(-0.4%)	0.	(0)

¹Estimates reflect continued funding under various federal programs (see text for details).

Table 4.3.2.5-2. (page 1 of 3)

NEVADA/UTAH
CAPITAL EXPENDITURE REQUIREMENTS (IN THOUSANDS OF 1980 DOLLARS)

DEPLOYMENT REGION		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE	
PROP. ACTION	\$18,268	\$58,445
1	221,913	58,682
2	120,321	55,941
3	111,906	67,818
4	117,477	62,076
5	110,849	67,993
6	116,168	62,086
8	45,781	27,467

M-X PLUS OTHER PROJECTS		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE	
PROP. ACTION	\$118,168	\$58,445
1	121,919	58,682
2	120,321	55,941
3	111,906	67,818
4	117,477	62,076
5	110,849	67,993
6	116,168	62,086
8	45,781	27,467

CLARK COUNTY, NV.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE	
PROP. ACTION	\$59,781	\$27,121
1	59,825	27,121
2	58,365	27,121
3	1,607	0
4	44,963	20,715
5	1,502	0
6	44,808	20,715
8	43,171	26,908

M-X PLUS OTHER PROJECTS		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE	
PROP. ACTION	\$59,781	\$27,121
1	59,825	27,121
2	58,365	27,121
3	1,607	0
4	44,963	20,715
5	1,502	0
6	44,808	20,715
8	43,171	26,908

EUREKA COUNTY, NV.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE	
PROP. ACTION	\$14,904	0
1	14,904	0
2	14,904	0
3	14,904	0
4	14,904	0
5	14,904	0
6	14,904	0
8	10	0

M-X PLUS OTHER PROJECTS		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE	
PROP. ACTION	\$14,904	0
1	14,904	0
2	14,904	0
3	14,904	0
4	14,904	0
5	14,904	0
6	14,904	0
8	10	0

LINCOLN COUNTY, NV.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE	
PROP. ACTION	\$10,232	\$1,013
1	10,712	1,471
2	10,232	584
3	10,219	985
4	10,712	1,552
5	9,748	485
6	10,152	933
8	7,536	559

M-X PLUS OTHER PROJECTS		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE	
PROP. ACTION	\$10,232	\$1,013
1	10,712	1,471
2	10,232	584
3	10,219	985
4	10,712	1,552
5	9,748	485
6	10,152	933
8	7,536	559

Table 4.3.2.5-2. (page 2 of 3)

NEVADA/UTAH CAPITAL EXPENDITURE REQUIREMENTS (IN THOUSANDS OF 1980 DOLLARS)		
JUAB COUNTY, UT.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE	
PROP. ACTION	\$10,824	0
1	10,829	0
2	12,349	2,089
3	10,829	0
4	10,829	0
5	10,829	0
6	10,829	0
8	634	0
ALTER-NATIVE	M-X PLUS OTHER PROJECTS	
PROP. ACTION	\$10,829	0
1	10,829	0
2	12,349	2,089
3	10,829	0
4	10,829	0
5	10,829	0
6	10,829	0
8	634	0

MILLARD COUNTY, UT.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE	
PROP. ACTION	\$12,979	5211
1	12,846	0
2	51,158	25,952
3	12,846	0
4	12,846	0
5	13,096	339
6	13,086	307
8	13,101	0

ALTER-NATIVE	M-X PLUS OTHER PROJECTS	
PROP. ACTION	\$12,979	\$ 211
	12,846	0
2	51,158	25,952
3	12,946	0
4	12,846	0
5	13,096	339
6	13,086	307
8	13,101	0

UTAH/SALT LAKE COUNTY, UT.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE	
PROP. ACTION	\$25,416	0
1	12,846	0
2	27,295	0
3	28,258	0
4	26,214	0
5	29,921	0
6	26,878	0
8	0	0

ALTER-NATIVE	M-X PLUS OTHER PROJECTS	
PROP. ACTION	\$25,416	0
	12,846	0
2	27,295	0
3	28,258	0
4	26,214	0
5	28,951	0
6	26,878	0
8	0	0

WASHINGTON COUNTY, UT.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE	
PROP. ACTION	\$1,769	\$ 613
1	3,950	2,941
2	374	0
3	5,528	3,877
4	5,659	4,041
5	2,573	738
6	2,600	887
8	24	0

ALTER-NATIVE	M-X PLUS OTHER PROJECTS	
PROP. ACTION	\$1,769	\$ 613
	3,950	2,941
2	374	0
3	5,528	3,877
4	5,659	4,041
5	2,573	738
6	2,600	887
8	24	0

3747

Table 4.3.2.5-2. (page 3 of 3)

NEVADA/UTAH		
CAPITAL EXPENDITURE REQUIREMENTS (IN THOUSANDS OF 1980 DOLLARS)		
NYE COUNTY, NV.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE	
PROP. ACTION	\$21,689	0
1	21,689	0
2	21,689	0
3	21,784	17
4	21,689	0
5	21,784	17
6	21,689	0
8	21,533	0
M-X PLUS OTHER PROJECTS		
PROP. ACTION	\$21,689	0
1	21,689	0
2	21,689	0
3	21,784	17
4	21,689	0
5	21,784	17
6	21,689	0
8	21,533	0
WHITE PINE COUNTY, NV.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE	
PROP. ACTION	\$15,255	0
1	15,255	0
2	15,255	0
3	51,125	27,170
4	15,255	0
5	51,125	27,170
6	15,255	0
8	213	0
M-X PLUS OTHER PROJECTS		
PROP. ACTION	\$15,255	0
1	15,255	0
2	15,255	0
3	51,125	27,170
4	15,255	0
5	51,125	27,170
6	15,255	0
8	213	0
BEAVER COUNTY, UT.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE	
PROP. ACTION	\$39,417	\$24,926
1	8,300	2,930
2	7,450	195
3	9,892	3,644
4	9,892	3,644
5	47,821	32,954
6	47,821	32,954
8	8,997	0
M-X PLUS OTHER PROJECTS		
PROP. ACTION	\$39,417	\$24,926
1	8,300	2,930
2	7,450	195
3	9,892	3,644
4	9,892	3,644
5	47,821	32,954
6	47,821	32,954
8	8,997	0
IRON COUNTY, UT.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE	
PROP. ACTION	\$ 5,998	\$ 4,562
1	38,622	24,220
2	1,250	0
3	44,515	32,124
4	44,515	32,124
5	8,546	6,289
6	8,546	6,289
8	1,063	0
M-X PLUS OTHER PROJECTS		
PROP. ACTION	\$ 5,998	\$ 4,562
1	38,622	24,220
2	1,250	0
3	44,515	32,124
4	44,515	32,124
5	8,546	6,289
6	8,546	6,289
8	1,063	0

3747

capital expenditure requirements. Jurisdictions with no anticipated long-term growth would have little incentive to build for peak year requirements. The potential for service level degradation in these areas is very high and mitigations strategies should be developed.

All counties in the deployment region are ill-equipped, due to low tax bases and/or property tax limitations, to raise the necessary monies for these levels of infrastructure development. Thus, federal assistance will be required. However, the local jurisdictions must prepare comprehensive community plans that will effectively utilize the monies made available to them. Development of timely and comprehensive community plans cannot be over-emphasized. Federal domestic assistance programs require that proposed infrastructure improvements are in conformity with an existing general plan before monies are allocated. Monies for planning assistance, as well as capital improvements, must arrive in a timely fashion. Appropriate strategies are now being developed through negotiations with the Department of Defense and potentially affected jurisdictions.

ALTERNATIVE 1 (4.3.2.5.3)

Under Alternative 1, net operations related effects and the capital expenditure requirements for the peak year and long-term in the Nevada/Utah deployment area will not differ significantly from the Proposed Action. The net fiscal effects in the Clark County area will not differ significantly from the effects under the Proposed Action. The significant difference is found in the location of the second operating base at Beryl (Iron County) as opposed to Milford (Beaver County) in the Proposed Action.

In the Iron County area, deficits of approximately \$1.7 million are anticipated in the peak year (1986). This represents about 5.3 percent of the total expenditure level anticipated at this time (Table 4.3.2.5-1). Timely receipt of outside financial assistance is critical if service levels are not to deteriorate to substandard levels.

Long-term capital expenditure requirements in the Iron County area will be \$24.2 million under Alternative 1, as opposed to \$4.5 million for the Proposed Action (Table 4.3.2.5-2). Peak year requirements will be \$38.6 million for Alternative 1, as opposed to \$6.0 million for the Proposed Action. Although temporary facilities could reduce these peak year costs substantially, the local jurisdictions in the area do not have the ability to raise the necessary monies for these levels of infrastructure development. Substantial outside aid would be required.

Capital expenditure requirements in the Coyote Spring Valley area (Clark County) are not significantly different than the requirements under the Proposed Action.

ALTERNATIVE 2 (4.3.2.5.4)

Under Alternative 2, net operations related effects and the capital expenditure requirements for the peak year and long-term in the Nevada/Utah deployment area will not significantly differ from the Proposed Action. The significant difference is found in the location of the second operating Base at Delta, Millard County as opposed to Milford (Beaver County) in the Proposed Action.

In the Millard County area, local jurisdictions in the aggregate are estimated to experience deficits approximately \$2.2 million in the peak year (1987). This represents 8.8 percent of the total expenditure level anticipated at this time (Table 4.3.2.5-1). Significant adverse effects would be realized in the form of lower service levels if outside aid is not made available to these jurisdictions. The net fiscal effects in the Clark County area will not differ significantly from the effects presented under the Proposed Action. No significant adverse effects are anticipated for either county area in the long-term.

Long-term capital expenditure requirements in the Millard County area will be \$25.9 million under Alternative 2, as opposed to \$.2 million under the Proposed Action (Table 4.3.2.5-2). Peak year requirements will be \$51.1 million for Alternative 1, as opposed to \$13.0 for the Proposed Action.

Capital expenditure requirements in the Clark County area are not significantly different than the requirements under the Proposed Action.

ALTERNATIVE 3 (4.3.2.5.6)

Under Alternative 3, net operations related effects and the capital expenditure requirements for the peak year and long-term in the Nevada/Utah deployment area will not differ significantly from the Proposed Action. The significant difference is found in the location of the first operating Base at Beryl (Iron County) and the second operating base at Ely (White Pine County).

Peak year (1985) deficits of approximately \$2.0 million are anticipated for local governments in the Iron County area (Table 4.3.2.5-1). This represents 6.1 percent of the total expenditure level anticipated at this time. Significant adverse effects would be realized in the form of lower service levels if outside aid is not made available. Similar effects are anticipated in the White Pine County area. Deficits of approximately \$3.8 million are estimated for the peak year (1986). This represents 16.0 percent of the estimated expenditure level at this time. Substantial degradation of service levels would result if outside aid is not made available in a timely fashion.

Long-term capital expenditure requirements in the Iron County area will be \$32.1 million under Alternative 3 as opposed to \$4.6 million under the Proposed Action. Peak year requirements under Alternative 3 amount to approximately \$44.5 million as opposed to \$6.0 million under the Proposed Action.

Capital expenditures in the long-term for White Pine County under Alternative 3 will be \$27.2 million. There are no long-term requirements under the Proposed Action. Peak year requirements will be \$51.1 million for Alternative 3, as opposed to \$15.2 million for the Proposed Action. Both county areas have inadequate tax bases to support these requirements and outside aid will be required to maintain adequate service standard levels.

ALTERNATIVE 4 (4.3.2.5.6)

Under Alternative 4, net operations related effects and the capital expenditure requirements for the peak year and long-term in the Nevada/Utah deployment region will not differ significantly from the Proposed Action. The significant

difference is found in the location of the first operating base at Beryl (Iron County) and Operating Base 2 at Coyote Spring Valley (Clark County).

Fiscal effects to local governments in the Iron County area will not differ significantly from the effects as discussed in the previous section. However, under this alternative the second operating base is not proposed for the Coyote Spring area in Clark County. Net effects to local jurisdictions in the Clark County area in the peak year (1986) are estimated to be deficits of approximately \$3.7 million. This is slightly less than the effects estimated under the Proposed Action and represents only 0.5 percent of the total estimated expenditure level anticipated at this time. No significant adverse effects are anticipated for long-term.

Long-term capital expenditure requirements in the Clark County area will be \$20.7 million under Alternative 4, as opposed to \$27.1 million for the Proposed Action (Table 4.3.3.5-2). Peak year requirements will be \$44.9 million for Alternative 4, as opposed to \$59.8 million for the Proposed Action. Though the tax base of the area is relatively strong and able to support infrastructure demands of these levels, property tax rate limitations effectively limit the amount of indebtedness the area may allow. Substantial outside aid would be required.

Capital expenditure requirements in the Iron County area are not significantly different than the requirements as discussed in the previous section.

ALTERNATIVE 5 (4.3.2.5.7)

Under Alternative 5, net operations related effects and the capital expenditure requirements for the peak year and long-term in the Nevada/Utah deployment region will not differ significantly from the Proposed Action. The significant difference is found in the location of the first operating base at Milford (Beaver County) and the second operating base at Ely (White Pine County).

The net effects anticipated to local governments in the Beaver County area in the peak year (1985) are deficits of approximately \$2.3 million. This represents about 11.7 percent of the total expenditures anticipated at this time (Table 4.3.3.5-1). This is a significant short-fall in monies which will seriously affect service levels in the area if outside aid is not made available in a timely fashion. Effects in White Pine County area do not differ significantly from the effects discussed under Alternative 3.

Long-term capital expenditures in the Beaver County area will be \$32.9 million under Alternative 5, as opposed to \$24.9 million in the Proposed Action. Peak year requirements will be \$47.8 million for Alternative 5, as opposed to \$39.4 million for the Proposed Action. Though peak year requirements could be reduced substantially by temporary facilities and/or other mitigative actions, the area as a whole does not have the tax base to support these levels of infrastructure demand. Extensive outside aid would be required.

Capital expenditure requirements in the White Pine County area are not significantly different than the requirements as presented under Alternative 3.

ALTERNATIVE 6 (4.3.2.5.8)

Under Alternative 6, net operations related effects and the capital expenditure requirements for the peak year and long-term in the Nevada/Utah deployment region will not differ significantly from the Proposed Action.

The significant difference is found in the location of Operating Base 1 at Milford (Beaver County) and Operating Base 2 at Coyote Spring (Clark County). Net effects in the Beaver County area do not differ significantly from the effects as discussed under Alternative 5. Net effects in the Clark County area do not differ significantly from the effects as discussed under Alternative 4.

ALTERNATIVE 7 (4.3.2.5.9)

This section discusses the aggregate net fiscal effects of all local government units in the deployment area (peak year and long-term effects) due to M-X under Alternative 7. Aggregate capital expenditure requirements for the peak year and long-term also are presented.

Under Alternative 7, operating bases are proposed for the Clovis area in Curry County, New Mexico, and near Dalhart in Hartley County, Texas. In all cases, the effects discussed stem from the population in-migration into the region. Both revenues and expenditures are anticipated to rise to peak levels and then drop to near steady state levels by 1994. The anticipated surplus/deficits are the critical issues which will significantly affect public service levels in the affected county areas. These effects have been estimated for M-X induced population in-migration. The effects of other projects in the area, however, are uncertain with respect to their net effects but have been incorporated into the baseline estimates of the potentially affected county areas.

In the deployment region as a whole, peak year (1986) deficits amount to approximately \$7.6 million, about 1.2 percent of the anticipated level of expenditures at this time (Table 4.3.2.5-3). No significant adverse long-term effects are anticipated, though excess revenues of approximately \$1.6 million are anticipated. These monies could be used to lower tax rates and/or state contributions to local school districts throughout the region. Similar effects are found at the local level in the county areas where operating bases are proposed. In the Curry County area deficits of approximately \$1.9 million are anticipated in the peak year, approximately 4.4 percent of the total expenditures anticipated at this time. In the long-term, approximately \$1.4 million in excess revenues are anticipated, though, these monies would probably be used to lower tax rates and/or state contributions to local school districts.

In Hartley County, peak year deficits of approximately \$681,000 are anticipated, representing 9.3 percent of the anticipated level of expenditures at this time. No significant adverse impacts are anticipated in the long-term. Similar effects are found in the Dallam County area. Peak year deficits of approximately \$761,000 are estimated in 1987. No adverse long-term effects are anticipated. County areas where only DDA facilities are proposed follow similar patterns. While most county areas do not have any long-term effects associated with them, short-term deficits

Table 4.3.2.5-3. (Page 1 of 3)

TEXAS/NEW MEXICO
LOCAL GOVERNMENT NET FISCAL EFFECTS¹
(IN THOUSANDS OF 1980 DOLLARS)

DEPLOYMENT REGION			
ALTER-NATIVE	PEAK YEAR	LONG TERM	
M-X Induced Change			
7	-7589.0 (-1.2%)	1595.0 (0.3%)	
8 B	-4547.0 (-.76%)	1270.0 (.20%)	

BAILEY COUNTY, TX.			
ALTER-NATIVE	PEAK YEAR	LONG TERM	
M-X Induced Change			
7	-324.0 (-3.9%)	0 (0%)	
8	-75.0 (-1.1%)	0 (0%)	

CASTRO COUNTY, TX.			
ALTER-NATIVE	PEAK YEAR	LONG TERM	
M-X Induced Change			
7	-69.0 (- .83%)	0 (0%)	
8	-56.0 (- .67%)	0 (0%)	

COCHRAN COUNTY, TX.			
ALTER-NATIVE	PEAK YEAR	LONG TERM	
M-X Induced Change			
7	-16.0 (- .40%)	0 (0%)	
8	-26.0 (- .65%)	0 (0%)	

DALLAM COUNTY, TX.			
ALTER-NATIVE	PEAK YEAR	LONG TERM	
M-X Induced Change			
7	-761.0 (-6.9%)	58.0 (0.9%)	
8 B	-300.0 (-4.0%)	0 (0%)	

DEAF SMITH, COUNTY, TX.			
ALTER-NATIVE	PEAK YEAR	LONG TERM	
M-X Induced Change			
7	-669.0 (-3.4%)	0 (0%)	
8B	-354.0 (-2.1%)	0 (0%)	

HALE COUNTY, TX.			
ALTER-NATIVE	PEAK YEAR	LONG TERM	
M-X Induced Change			
7	-119.0 (- .39%)	0 (0%)	
8 B	-37.0 (- .12%)	0 (0%)	

HARTLEY COUNTY, TX.			
ALTER-NATIVE	PEAK YEAR	LONG TERM	
M-X Induced Change			
7	-681.0 (-9.3%)	333.0 (3.7%)	
8B	-372.0 (-10.3%)	0 (0%)	

3739

1. Estimates reflect continued funding under various federal programs (see text for details).

Table 4.3.2.5-3. (Page 2 of 3)

TEXAS/NEW MEXICO
LOCAL GOVERNMENT NET FISCAL EFFECTS¹
(IN THOUSANDS OF 1980 DOLLARS)

HOCKLEY COUNTY, TX.			LAMB COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM	ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X Induced Change			M-X Induced Change	
7	- 62.0 (- .36%)	0 (0%)	7	- 35.0 (- .26%)	0 (0%)
8B	- 43.0 (- .25%)	0 (0%)	8B	- 36.0 (- .27%)	0 (0%)

LUBBOCK COUNTY, TX.			MOORE COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM	ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X Induced Change			M-X Induced Change	
7	-743.0 (- .39%)	1.0 (0%)	7	-422.0 (- .37%)	-6.0 (- .04%)
8B	-666.0 (- .35%)	0 (0%)	8B	- 77.0 (- .66%)	0 (0%)

OLDHAM COUNTY, TX.			PARMER COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM	ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X Induced Change			M-X Induced Change	
7	- 25.0 (-1.0%)	0 (0%)	7	-368.0 (-4.0%)	0 (0%)
8B	- 11.0 (- .51%)	0 (0%)	8B	- 8.0 (- .10%)	0 (0%)

POTTER/RANDALL COUNTIES, TX.			SHERMAN COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM	ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X Induced Change			M-X Induced Change	
7	-2011.0 (-1.3%)	-69.0 (- .04%)	7	-133.0 (-3.8%)	0 (0%)
8B	- 750.0 (.52%)	- 6.0 (- .01%)	8B	0 (0%)	0 (0%)

3739

1. Estimates reflect continued funding under various federal programs (see text for details).

Table 4.3.2.5-3. (Page 3 of 3)

**TEXAS/NEW MEXICO
LOCAL GOVERNMENT NET FISCAL EFFECTS¹
(IN THOUSANDS OF 1980 DOLLARS)**

SWISHER COUNTY, TX.			
ALTER-NATIVE	PEAK YEAR	LONG TERM	
	M-X Induced Change		
7	- 20.0 (-.24%)	0	(0%)
8B	- 14.0 (-.17%)	0	(0%)

CHAVES COUNTY, NM.			
ALTER-NATIVE	PEAK YEAR	LONG TERM	
	M-X Induced Change		
7	-462.0 (-.89%)	0	(0%)
8B	-552.0 (-1.0%)	0	(0%)

CURRY COUNTY, NM.			
ALTER-NATIVE	PEAK YEAR	LONG TERM	
	M-X Induced Change		
7	-1897.0 (-4.4%)	1361.0	(3.3%)
8B	-1537.0 (-3.6%)	1356.0	(3.3%)

DE BACA COUNTY, NM.			
ALTER-NATIVE	PEAK YEAR	LONG TERM	
	M-X Induced Change		
7	- 19.0 (- .91%)	0	(0%)
8B	- 22.0 (-1.1%)	0	(0%)

HARDING COUNTY, NM.			
ALTER-NATIVE	PEAK YEAR	LONG TERM	
	M-X Induced Change		
7	- 433.0 (-8.7%)	0	(0%)
8B	- 553.0(-12.7%)	0	(0%)

QUAY COUNTY, NM.			
ALTER-NATIVE	PEAK YEAR	LONG TERM	
	M-X Induced Change		
7	-450.0 (-3.6%)	0	(0%)
8B	-503.0 (-4.1%)	0	(0%)

ROOSEVELT COUNTY, NM.			
ALTER-NATIVE	PEAK YEAR	LONG TERM	
	M-X Induced Change		
7	- 470.0 (-2.7%)	-81.0	(-.53%)
8B	- 357.0 (-2.1%)	-80	(-.52%)

UNION COUNTY, NM.			
ALTER-NATIVE	PEAK YEAR	LONG TERM	
	M-X Induced Change		
7	- 25.0 (- .65%)	0	(0%)
8B	0 (0%)	0	(0%)

3739

1. Estimates reflect continued funding under various federal programs (see text for details).

are anticipated in the early years. The potential for serious degradation of service levels is quite high in these areas.

Aggregate capital expenditure requirements in the Texas/New Mexico deployment region, first operating base at Clovis and second operating base at Dalhart, are presented in Table 4.3.2.5-4. Capital outlays necessary to support long-term infrastructure demand (public buildings, streets, schools, health care facilities, water and wastewater systems) due to M-X are approximately \$76.9 million. Peak year demands would result in a total of \$263.4 million, approximately 242 percent greater than long-term requirements. Temporary facilities, and/or other mitigative strategies, could reduce these peak year requirements substantially.

Long-term capital expenditure requirements are necessary for the base and contiguous counties in which impacts of OB facility construction is experienced. First operating base at Clovis (Curry County) and second operating base at Dalhart (Dallam and Hartley counties) will experience \$36.0 million, \$4.9 million and \$20.1 million in long-term capital expenditures, respectively. Base county impacts, therefore, represent 80 percent of total capital expenditure requirements in the Texas/New Mexico deployment region. The remaining effects are felt in the impacted counties of Roosevelt, New Mexico; Moore, Texas; Potter/Randall, Texas; and Lubbock, Texas.

Peak year capital expenditure requirements are necessary for counties where construction impacts of OB and DDA facilities are experienced. All counties in the Texas/New Mexico deployment region are so affected. First operating base at Clovis (Curry County) and second operating base at Dalhart (Dallam and Hartley Counties) will experience \$57.2 million, \$26.5 million, and \$30.5 million in peak year capital expenditures, respectively. This represents approximately 43 percent of total peak year requirements in the Texas/New Mexico deployment region. Consequently, the cumulative impacts of the non-base counties represents the majority of peak year capital expenditure requirements. Jurisdictions with no long-term growth anticipated would not have an incentive to build for peak year requirements. The potential for service level degradation in these areas is very high and mitigation strategies should be developed. All counties in the deployment region are ill-equipped, due to low tax bases and/or property tax limitations, to raise the necessary monies for these levels of infrastructure development. Thus, federal assistance will be required. Consequently, the local jurisdictions must have adequate time to prepare comprehensive community plans that will effectively utilize the monies to be made available to them. Development of timely and comprehensive community plans cannot be over-emphasized. Federal domestic assistance programs require that proposed infrastructure improvements are in conformity with an existing general plan before monies are allocated. Monies for planning assistance must arrive in a timely fashion. With population in-migration anticipated as early as 1982, jurisdictions should now be planning for this growth through development of comprehensive community plans and application of funds from existing sources as well as requests for specific funds to mitigate direct M-X induced impacts.

Table 4.3.2.5-4. (page 1 of 3)

**TEXAS/NEW MEXICO
CAPITAL EXPENDITURE REQUIREMENTS
(IN THOUSANDS OF 1980 DOLLARS)**

DEPLOYMENT REGION		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE	
7	163,373	76,915
8	145,165	38,413

BAILEY COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE	
7	5,413	0
8	1,395	0

CASTRO COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE	
7	1,68	0
8	646	0

COCHRAN COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE	
7	339	0
8	300	0

DALLAM COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE	
7	26,322	4,947
8	7,532	0

DEAF SMITH, COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE	
7	10,093	0
8	5,404	0

HALE COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE	
7	2,279	0
8	339	0

HARTLEY COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE	
7	30,535	20,106
8	6,334	0

3748

Table 4.3.2.5-4. (page 2 of 3)

**TEXAS/NEW MEXICO
CAPITAL EXPENDITURE REQUIREMENTS
(IN THOUSANDS OF 1980 DOLLARS)**

HOCKLEY COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	N-X INDUCED CHANGE	
7	1,421	0
8	568	0

LAMB COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	N-X INDUCED CHANGE	
7	581	0
8	473	0

LUBBOCK COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	N-X INDUCED CHANGE	
7	15,362	204
8	10,123	8

MOORE COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	N-X INDUCED CHANGE	
7	9,341	4,806
8	826	0

OLDHAM COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	N-X INDUCED CHANGE	
7	390	0
8	165	0

PARMER COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	N-X INDUCED CHANGE	
7	6,518	0
8	120	0

POTTER/RANDALL COUNTIES, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	N-X INDUCED CHANGE	
7	42,611	8,364
8	11,289	594

SHERMAN COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	N-X INDUCED CHANGE	
7	1,907	0
8	0	0

3748

Table 4.3.2.5-4. (page 3 of 3)

**TEXAS/NEW MEXICO
CAPITAL EXPENDITURE REQUIREMENTS
(IN THOUSANDS OF 1980 DOLLARS)**

SWISHER COUNTY, TX.			CHAVES COUNTY, NM.		
ALTER-NATIVE	PEAK YEAR	LONG TERM	ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE			M-X INDUCED CHANGE	
7	366	0	7	12,247	0
8	139	0	8	11,016	0

CURRY COUNTY, NM.			DE BACA COUNTY, NM.		
ALTER-NATIVE	PEAK YEAR	LONG TERM	ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE			M-X INDUCED CHANGE	
7	7,179	36,112	7	327	0
8	4,131	35,380	8	335	0

HARDING COUNTY, NM.			QUAY COUNTY, NM.		
ALTER-NATIVE	PEAK YEAR	LONG TERM	ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE			M-X INDUCED CHANGE	
7	12,783	0	7	11,420	0
8	11,940	0	8	10,548	0

ROOSEVELT COUNTY, NM.			UNION COUNTY, NM.		
ALTER-NATIVE	PEAK YEAR	LONG TERM	ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE			M-X INDUCED CHANGE	
7	14,225	2,476	7	449	0
8	12,410	2,432	8	0	0

3748

ALTERNATIVE 8 (4.3.2.5.10)

This section discusses the aggregate net fiscal effects of all local government units under the split deployment alternative. Aggregate capital expenditure requirements for peak year and long term effects also are presented. Estimates of the total expenditures and revenues levels anticipated by local governments in the deployment region, as well as the capital investment requirements by type of indebtedness are presented in Chapter 4. Under Alternative 8, operating bases are proposed for the Coyote Spring area (Clark County) in Nevada and Clovis (Curry County) in New Mexico.

Net effects to local governments in the Nevada/Utah region as a whole under this alternative are deficits in the peak year (1985) of approximately \$6.2 million representing less than 1.0 percent of the total expenditures anticipated at this time (Table 4.3.2.5-1). In the Clark County area, peak year deficits (1985) are approximately \$3.3 million. Though fewer county areas in the Nevada/Utah region are affected under this alternative, the county areas of Lincoln, Wye, Beaver, and Millard will continue to experience impacts associated with construction of the DDA facilities. Short term deficits are estimated for these areas in the early years of the project (1982-1987).

Under Alternative 8, long-term capital expenditure requirements in the Nevada/Utah region total \$27.5 million, as opposed to \$58.4 million in the Proposed Action, a decrease of 52 percent (Table 4.3.2.5-2). Peak year requirements similarly decline from \$218.2 million in the Proposed Action to \$85.8 million under Alternative 8, a decrease of 60 percent.

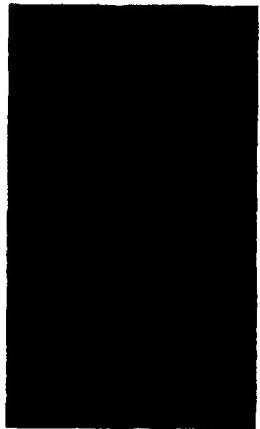
In Clark County, capital expenditure requirements for Alternative 8 are \$26.9 million in the long-term, as opposed to \$27.1 million in the Proposed Action. No significant difference in long term requirements is evident. Peak year requirements, however, are expected to decrease from \$59.8 in the Proposed Action to \$43.2 million for Alternative 8.

Peak year net effects to local governments in the Texas/New Mexico region as a whole are deficits of approximately \$4.5 million (Table 4.3.2.5-3), representing less than 1 percent of the estimated expenditure level at this time. Fewer county areas under this alternative are affected by DDA facility construction. Significant reductions in net fiscal effects are anticipated for the county areas of Bailey, Dallam, Moore, Parmer, Potter/Randall, Sherman, and Union. No significant adverse effects are anticipated in the long-term for any of the county areas in this region.

Long-term capital expenditures requirement in the region total \$38.4 million for Alternative 8. This compares to the \$76.9 million in capital requirements under Alternative 7, the full deployment alternative. Peak year requirements similarly decline from \$263.7 million in Alternative 7, to \$145 million under Alternative 8, a decrease of 45 percent.

In Curry County, capital expenditure requirements for Alternative 8 are \$35.4 million and \$54 million for the long-term and peak year respectively. No significant difference is evident for both cases when compared to Alternative 7, the full deployment alternative.

Community Infrastructure



COMMUNITY INFRASTRUCTURE

Community Infrastructure includes a variety of physical systems - schools, roads, health and safety facilities - and, for this discussion incorporates the need to have skilled personnel to insure that the physical buildings and equipment function in a proper manner.

EDUCATIONAL SERVICES (4.3.2.6.1)

INTRODUCTION (4.3.2.6.1.1)

The magnitude and severity of the short term impact on the education system is determined by the number of construction phase workers who move into the area with school aged children. Since substantial numbers of these families will live in the counties where construction is taking place, a burden is put on the available educational infrastructure over a relatively short period of time. Overcrowded classrooms and insufficient teaching staff are two potential problems. Not only will there be problems of coping physically with large numbers of children, but also there will be a disruption of the educational process as a result of newcomers overloading the system. The transient nature of new students and their high turnover rates, combined with the overall disruption of the socialization process, has the potential to impact learning process for all students. On the positive side, the new students and their parents bring into the community educational diversity, funds for new programs and courses, and expanded demands placed upon the entire school system.

An important variable in assessing the potential impacts due to MX deployment is the number of additional teachers that will be needed to meet anticipated enrollment demands. The following sections discuss the teacher requirements that may be expected for each county experiencing M-X related enrollment increases as the principal measure of impact. Details on enrollments by grade levels, the school facility requirements, the cost of providing those facilities and school district budgets are also discussed.

The initial phase in evaluating effects upon educational services consisted of determining the school-aged population anticipated as a result of project construction and operations. The number of teachers required to meet the increased

Community Infrastructure--Proposed Action

enrollment was calculated by applying standard pupil/teacher ratios to the number of pupils estimated by the model. For a more detailed presentation of the methodology, see Technical Report on Community and Regional Socioeconomic Impact Assessment Model.

The significance of the teacher requirement impacts can be thought of as a function of the likely temporary increase in the number of teachers required. It has been historically difficult to induce teachers to move to an area where demand for their services will be shortlived. One measure of impact significance used, then, is the difference between peak-year needs and long-term needs, or anticipated number of temporary teachers required. This temporary increase is expressed as a percentage of projected total teacher requirements in the peak year, which is the sum of the needs under normal growth and M-X related needs.

PROPOSED ACTION (4.3.2.6.1.2)

The Proposed Action will require educational services primarily within the jurisdictions of the Clark County and Beaver County School Districts. Other school districts within the deployment area will receive varying degrees of project related demands on their education systems. The degree of M-X related impacts on education services and facilities in each county will depend to a large extent upon the number of education facilities located in each county, the capacity of the existing infrastructure, the proximity of operating base locations, and the type of construction activity (DDA versus operating base construction).

Table 4.3.2.6-1 presents the M-X-induced peak year and long-term teacher requirements and percent change over normal growth baseline, by alternative for Nevada and Utah. The lower half of the table includes an analysis of M-X plus other projects proposed for construction in the deployment region.

Presently, educational services in the Nevada/Utah deployment region are adequate to serve the existing population. Changes in enrollment demands due to M-X deployment will have a significant impact on many school districts within the deployment region. At the regional level, project-induced enrollments will peak in 1987, generating a need for 826 additional teachers. The regional cumulative impact of M-X and other projects totals 1,183 in peak year 1987, a 43 percent increase over M-X alone.

Peak enrollments expected in Clark County and Beaver County School Districts will create a potential need for 248 and 200 teachers, respectively, in the peak year. In Beaver County, this represents a highly significant increase of more than 300 percent over baseline projections. When other projects are included, this figure increases to more than 400 percent. With long-term requirements totalling 158 in Beaver County, an additional requirement for 42 teachers or 16 percent, can be expected. M-X alone represents a required increase of 35 teachers, or 11.1 percent. The relative impact on Clark County, however, will be significantly less (3.6 percent for M-X alone and 3.8 percent over baseline for M-X plus other projects) because of the present strong infrastructure base. Although much of Clark County is rural, the largest concentration of population is in the urban Las Vegas Valley where the education system is better equipped to accommodate a large and rapid increase in enrollment demands.

Table 4.3.2.6-1. (Page 1 of 3)

NEVADA/UTAH TEACHER REQUIREMENTS

DEPLOYMENT REGION		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
PROP. ACTION	826 (4.1)	386 (1.7)
1	826 (4.1)	386 (1.7)
2	818 (4.1)	381 (1.7)
3	822 (4.1)	410 (1.8)
4	797 (4.0)	393 (1.7)
5	822 (4.1)	411 (1.8)
6	797 (4.0)	395 (1.7)
8	348 (1.8)	204 (0.9)

M-X PLUS OTHER PROJECTS (% above normal growth baseline)		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
PROP. ACTION	1183 (5.9)	618 (2.7)
1	1181 (5.9)	617 (2.7)
2	1174 (5.9)	612 (2.7)
3	1178 (5.9)	640 (2.8)
4	1153 (5.7)	624 (2.7)
5	1178 (5.9)	640 (2.8)
6	1153 (5.7)	626 (2.7)
8	708 (3.6)	436 (1.9)

CLARK COUNTY, NV.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
PROP. ACTION	248 (3.6)	204 (2.5)
1	248 (3.6)	204 (2.5)
2	243 (3.7)	204 (2.5)
3	5 (0.1)	0 (-0.0)
4	197 (2.8)	156 (1.9)
5	5 (0.1)	0 (-0.0)
6	196 (2.8)	156 (1.9)
8	202 (2.8)	202 (2.5)

M-X PLUS OTHER PROJECTS (% above normal growth baseline)		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
PROP. ACTION	262 (3.8)	215 (2.6)
1	262 (3.8)	215 (2.6)
2	255 (3.8)	215 (2.6)
3	18 (0.1)	11 (0.1)
4	210 (3.0)	167 (2.1)
5	17 (0.2)	11 (0.1)
6	209 (3.0)	167 (2.0)
8	213 (3.0)	213 (2.6)

EUREKA COUNTY, NV.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
PROP. ACTION	72 (493.7)	0 (0)
1	72 (493.7)	0 (0)
2	72 (493.7)	0 (0)
3	72 (493.7)	0 (0)
4	72 (493.7)	0 (0)
5	72 (493.7)	0 (0)
6	72 (493.7)	0 (0)
8	0 (0.0)	0 (0)

M-X PLUS OTHER PROJECTS (% above normal growth baseline)		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
PROP. ACTION	72 (514.3)	0 (0)
1	72 (514.3)	0 (0)
2	72 (514.3)	0 (0)
3	72 (514.3)	0 (0)
4	72 (514.3)	0 (0)
5	72 (514.3)	0 (0)
6	72 (514.3)	0 (0)
8	0 (0.0)	0 (0)

LINCOLN COUNTY, NV.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
PROP. ACTION	49 (100.6)	3 (5.4)
1	51 (104.7)	4 (7.2)
2	49 (100.6)	2 (3.6)
3	49 (100.6)	3 (5.4)
4	51 (104.7)	4 (7.2)
5	47 (96.5)	2 (3.6)
6	49 (100.6)	3 (5.4)
8	36 (71.3)	2 (3.6)

M-X PLUS OTHER PROJECTS (% above normal growth baseline)		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
PROP. ACTION	49 (102.1)	3 (5.4)
1	51 (106.2)	4 (7.2)
2	49 (102.1)	2 (3.6)
3	49 (102.1)	3 (5.4)
4	51 (106.2)	4 (7.2)
5	47 (97.9)	1 (1.8)
6	49 (102.1)	3 (5.4)
8	36 (72.0)	2 (3.6)

Table 4.3.2.6-1. (Page 2 of 3)

NEVADA/UTAH TEACHER REQUIREMENTS		
NYE COUNTY, NV.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
PROP. ACTION	104 (76.5)	0 (0)
1	104 (76.5)	0 (0)
2	104 (76.5)	0 (0)
3	104 (76.5)	0 (0)
4	104 (76.5)	0 (0)
5	104 (76.5)	0 (0)
6	104 (76.5)	0 (0)
8	55 (42.2)	0 (0)
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)	
PROP. ACTION	104 (77.0)	0 (0)
1	104 (77.0)	0 (0)
2	104 (77.0)	0 (0)
3	104 (77.0)	0 (0)
4	104 (77.0)	0 (0)
5	104 (77.0)	0 (0)
6	104 (77.0)	0 (0)
8	55 (42.3)	0 (0)

WHITE PINE COUNTY, NV.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
PROP. ACTION	73 (70.1)	0 (0.0)
1	73 (70.1)	0 (0.0)
2	73 (70.1)	0 (0.0)
3	239 (216.4)	174 (143.8)
4	73 (70.1)	0 (0.0)
5	239 (216.4)	174 (143.8)
6	73 (70.1)	0 (0.0)
8	1 (1.0)	0 (0.0)
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)	
PROP. ACTION	141 (135.6)	57 (47.5)
1	141 (135.6)	32 (26.7)
2	141 (135.6)	57 (47.5)
3	299 (271.8)	230 (191.7)
4	141 (135.6)	57 (47.5)
5	299 (271.8)	230 (191.7)
6	141 (135.6)	57 (47.5)
8	70 (67.3)	57 (47.5)

BEAVER COUNTY, UT.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
PROP. ACTION	200 (322.1)	158 (242.4)
1	40 (66.2)	11 (16.9)
2	36 (59.6)	1 (1.5)
3	45 (74.4)	14 (21.5)
4	45 (74.4)	14 (21.5)
5	222 (367.2)	208 (319.1)
6	222 (367.2)	208 (319.1)
8	41 (67.2)	0 (0.0)
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)	
PROP. ACTION	252 (406.4)	217 (333.8)
1	120 (200.0)	69 (106.1)
2	116 (193.3)	59 (90.8)
3	125 (208.3)	72 (110.8)
4	125 (208.3)	72 (110.8)
5	301 (501.7)	266 (409.2)
6	301 (501.7)	266 (409.2)
8	98 (163.3)	59 (90.8)

IRON COUNTY, UT.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
PROP. ACTION	23 (8.5)	18 (6.2)
1	196 (74.1)	156 (53.8)
2	4 (1.6)	0 (0.0)
3	206 (77.9)	205 (70.6)
4	206 (77.9)	205 (70.6)
5	31 (11.7)	24 (8.3)
6	31 (11.7)	24 (8.3)
8	4 (1.2)	0 (0.0)
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)	
PROP. ACTION	23 (8.9)	0 (0.0)
1	197 (74.6)	157 (54.1)
2	6 (2.4)	0 (0.0)
3	207 (78.4)	206 (71.0)
4	207 (78.4)	206 (71.0)
5	32 (12.1)	25 (8.6)
6	32 (12.1)	25 (8.6)
8	5 (2.0)	1 (0.3)

Table 4.3.2.6-1. (Page 3 of 3)

NEVADA/UTAH TEACHER REQUIREMENTS		
JUAB COUNTY, UT.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
PROP. ACTION		
1	52 (61.2)	0 (0.0)
2	59 (69.4)	8 (8.4)
3	52 (61.2)	0 (0.0)
4	52 (61.2)	0 (0.0)
5	52 (61.2)	0 (0.0)
6	52 (61.2)	0 (0.0)
8	3 (3.6)	0 (0.0)
ALTER-NATIVE		
M-X PLUS OTHER PROJECTS (% above normal growth baseline)		
1	79 (94.0)	9 (9.5)
2	85 (101.2)	17 (17.9)
3	79 (94.0)	9 (9.5)
4	79 (94.0)	9 (9.5)
5	79 (94.0)	9 (9.5)
6	79 (94.0)	9 (9.5)
8	29 (35.0)	9 (9.5)
MILLARD COUNTY, UT.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
PROP. ACTION		
1	62 (44.9)	1 (0.7)
2	254 (184.0)	166 (112.1)
3	62 (44.9)	3 (2.0)
4	62 (44.9)	1 (0.7)
5	62 (44.9)	1 (0.7)
6	62 (44.9)	1 (0.7)
8	63 (47.6)	0 (0.0)
ALTER-NATIVE		
M-X PLUS OTHER PROJECTS (% above normal growth baseline)		
1	139 (100.7)	35 (23.6)
2	332 (240.6)	201 (135.8)
3	139 (100.7)	35 (23.6)
4	139 (100.7)	35 (23.6)
5	140 (101.4)	36 (24.3)
6	140 (101.4)	36 (24.3)
8	148 (112.1)	35 (23.6)
UTAH/SALT LAKE COUNTY, UT.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
PROP. ACTION		
1	79 (0.7)	9 (9.5)
2	78 (0.6)	9 (9.5)
3	85 (0.7)	17 (17.9)
4	88 (0.7)	9 (9.5)
5	82 (0.7)	9 (9.5)
6	90 (0.7)	9 (9.5)
8	84 (0.7)	9 (9.5)
0 (0.0)	0 (0.0)	0 (0.0)
ALTER-NATIVE		
M-X PLUS OTHER PROJECTS (% above normal growth baseline)		
1	164 (1.3)	59 (0.4)
2	162 (1.3)	59 (0.4)
3	170 (1.4)	59 (0.4)
4	173 (1.4)	59 (0.4)
5	166 (1.4)	59 (0.4)
6	175 (1.4)	59 (0.4)
8	168 (1.4)	59 (0.4)
0 (0.0)	0 (0.0)	0 (0.0)
WASHINGTON COUNTY, UT.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
PROP. ACTION		
1	5 (1.5)	2 (0.5)
2	15 (4.1)	11 (2.8)
3	1 (0.3)	0 (0.0)
4	19 (5.3)	14 (3.5)
5	20 (5.6)	14 (3.5)
6	8 (2.4)	2 (0.5)
8	8 (2.4)	3 (0.8)
0 (0.0)	0 (0.0)	0 (0.0)
ALTER-NATIVE		
M-X PLUS OTHER PROJECTS (% above normal growth baseline)		
1	5 (1.5)	2 (0.5)
2	14 (4.1)	11 (2.8)
3	1 (0.3)	0 (0.0)
4	19 (5.3)	14 (3.5)
5	20 (5.6)	14 (3.5)
6	8 (2.4)	2 (0.5)
8	8 (2.4)	3 (0.7)
0 (0.0)	0 (0.0)	0 (0.0)

Subsequent out-migration will occur in a number of counties resulting in a continuing decrease in total enrollments and teacher requirements attributable to M-X deployment. This pattern will persist until a steady state is reached. Approximately 386 teachers are expected to be required over the long term, region-wide. With the addition of other projects, a total of 618 teachers will be required. Clark County and Beaver County will experience, respectively, 53 and 41 percent of the M-X induced long-term regional requirements. For Clark County this increase can easily be accommodated. However, for Beaver County the long-term impact remains at 242.4 percent (and 333.8 percent including other projects) above baseline projections. This level of impact will require substantial and permanent expansion of educational facilities and personnel. For the other counties, although enrollment increases and teacher requirements are highly significant, they are temporary with few, if any, additional teachers required in the long term.

This boom-bust phenomenon will be observed in almost all counties where construction activity is limited to protective structures. In these cases, all induced impacts are quite short-lived and will thus cause severe strain on the present educational capacities. Considering M-X requirements alone, several counties will require highly significant increases in the number of teachers. The absolute number of additional teachers required by M-X in the peak year in these counties varies from 49 (Lincoln) to 104 (Nye), with the relative increase over baseline varying from 44.9 percent (Millard) to 493.7 percent (Eureka). Eureka is likely to experience a temporary need for 72 teachers (a temporary increase of 83.7 percent) since no teachers are required in the long term.

Iron and Salt Lake Counties will require a substantial number of additional teachers (22 in Iron and 79 in Salt Lake), however, the relative increase over baseline is not significant (8.5 percent for Iron and 0.7 percent for Salt Lake). Assuming enrollment demands from other projects, in addition to those generated by M-X activity, three counties (already severely impacted) experience substantially more demands. They are White Pine (135.6 percent versus 70.1 percent), Millard (100.7 percent versus 44.9 percent) and Juab (94 percent versus 61.2 percent).

Demands on the school districts in affected counties will occur with such rapidity and magnitude that additional advance planning will be necessary to mitigate the peak year and long-term impacts. Enrollment demands will necessitate considerable funding for construction of new school facilities, temporary facilities, and temporary teacher recruitment. The major planning problem for local areas is the need to provide temporary services during peak construction years without incurring debts that cannot be met by the decreased population of the operational period. This problem is especially significant in the counties without operating bases, where the effects are short term. For example, Eureka County will require 72 teachers in the peak year 1988, and few if any teachers after 1989. Strategies that could be employed to mitigate such temporary, but highly significant impacts, include making available a stock of mobile facilities which could be moved about the entire region meeting high levels of demand as needed. A pool of teachers could serve the same function.

ALTERNATIVE I (4.3.2.6.1.3)

Alternative I differs from the Proposed Action only in the location of the second operating base. Under this alternative the second operating base will be

Community Infrastructure--Alternatives 1, 2, 3

located at Beryl in Iron County, Utah. The shift of the operating base away from Milford in Beaver County, Utah will reduce the degree of impact in Beaver County by 5 times in the peak year, and by even more in the long term. Forty teachers will be required in peak year 1986, representing a 66.2 percent increase above normal growth baseline. The long-term requirements in Beaver County are reduced to eleven teachers, a 16.9 percent increase over baseline. Although the cumulative impacts of M-X and other projects in Beaver County will be less under Alternative 1, the number of teachers required would continue to be significant, reaching a peak of 120 teachers, a 200 percent increase over baseline. Long-term cumulative requirements also remain relatively high at 69 teachers (106.1 percent above baseline) due to population spillover effects from Iron County.

Teacher requirements are in general eight times greater in Iron County under Alternative 1 than the Proposed Action due to the presence of the operating base at Beryl.

In this case, 196 additional teachers will be required to meet peak year enrollment demands (a 74.1 percent increase over baseline), and 156 teachers will be needed over the long term. Washington County is the only other county to be affected differently under the Proposed Action, but although peak year requirements are 3 times higher than under the Proposed Action, they still represent an insignificant 4.1 percent increase over baseline.

ALTERNATIVE 2 (4.3.2.6.1.4)

Alternative 2 differs from the Proposed Action only in the location of the second operating base. Under this alternative the second operating base will be located at Delta in Millard County, Utah. The shift of the base out of Beaver County reduces the M-X requirements projected for Beaver County to 36 teachers in the peak year, 59.6 percent above baseline, and one teacher in the long term, 1.5 percent above baseline.

With the second operating base moved to Delta, Millard County's M-X related peak year teacher requirements are four times greater at 254 teachers, representing a 184 percent increase over baseline. One hundred sixty six teachers are required for the long term (a 112.1 percent increase over baseline), whereas under the Proposed Action, there is only one teacher required. A temporary need for 88 teachers (22.4 percent) may present problems to the school system during the peak construction period. Other counties to be affected differently under Alternative 2 include Iron County, which will experience lower peak year enrollment increases requiring only 4 teachers (1.6 percent above baseline).

ALTERNATIVE 3 (4.3.2.6.1.5)

The DDA facilities remain the same in this alternative as under the Proposed Action. Both operating base locations are different, however. The first operating base will be located at Beryl, Utah and the second operating base at Ely, Nevada. The deployment region, as a whole, will experience the most impacts under this alternative and Alternative 5. However, the most significant differences occur at the county level. Iron, Washington and White Pine counties will require 9 times, 4 times and 3 times more teachers, respectively, in the peak year under Alternative 3. Clark and Beaver counties, on the other hand, will experience significantly lower

teacher requirements. Millard County, Utah will require significantly more teachers in the long term under Alternative 3. Iron and Washington counties in Utah will require approximately 206 (77.9 percent above baseline) and 19 (5.3 percent above baseline) teachers, respectively, in the peak year. Long-term requirements remain very similar to peak requirements in both counties. White Pine County, Nevada will experience the most impact under this alternative and Alternative 5, because of the presence of the operating base at Ely. When other projects are included, a total of 239 teachers will be required during peak year in White Pine County (216.4 percent increase over baseline). Cumulative long-term requirements are also high at 230 teachers (191.7 percent above baseline).

The lack of an operating base in the Coyote Spring Valley area reduces the M-X requirements projected for Clark County to five teachers in the peak year and zero teachers in the long term. Even when other projects are included, the cumulative peak year requirements are comparatively very small, representing only a .2 percent increase over baseline. Beaver County will experience a need for 45 teachers in peak year 1986 (74.4 percent over baseline) and a need for 14 teachers in the long term (21.5 percent over baseline). When other projects are considered, peak year requirements increase by about 180 percent to 125 teachers, a 208.3 percent increase over baseline. A total of 72 teachers will be required to meet the cumulative long-term enrollment demands generated by other projects plus M-X in Beaver County.

ALTERNATIVE 4 (4.3.2.6.1.6)

The Proposed Action and Alternative 4 use the same DDA. The operating base locations are different, however, with the first operating base located near Beryl, Utah and the second in the Coyote Spring Valley, Nevada. Iron and Washington counties in Utah will receive greater impacts under Alternative 4. Clark and Beaver counties will experience lesser impacts than under the Proposed Action.

Iron County and Washington County will require approximately 206 (77.9 percent above baseline) and 20 (5.6 percent above baseline) teachers, respectively, in the peak year. Long-term requirements remain very similar to peak requirements in both counties, i.e., 205 teachers are needed to meet long-term enrollment demands in Iron County.

The Clark County peak teacher requirements are now projected to be 75 percent of those under the Proposed Action, representing a 2.8 percent increase over baseline projections. The long-term and cumulative impacts are reduced similarly. The impacts in Beaver County will now be substantially less than under the Proposed Action, with 45 teachers needed in the peak year (74.4 percent over baseline) and 14 teachers in the long term (21.5 percent over baseline). When other projects are considered, peak year requirements increase to 125 teachers, a 208.3 percent increase over baseline. A total of 72 teachers will be required to meet the cumulative long-term enrollment demands generated by other projects and M-X. This is almost five times the number of teachers needed to meet M-X needs alone. The cumulative temporary need for teachers when other projects are added will be close to 28.6 percent, or in absolute terms, 53 teachers, in the peak construction year.

ALTERNATIVE 5 (4.3.2.6.1.7)

Alternative 5 differs from the Proposed Action only in the location of the two operating bases. The first operating base is near Milford, Utah and the second base is near Ely, Nevada. The counties affected by the changes are Clark and White Pine in Nevada, and Beaver, Iron, and Washington in Utah.

With the first operating base no longer in Clark County, its peak teacher requirements are only 2 percent of those under the Proposed Action, and moreover there are no permanent effects in Clark County. With the second operating base located near Ely, the White Pine County peak year teacher requirements are 230 percent above those for the Proposed Action, with a need for 239 teachers, representing an increase of 216.4 percent over the baseline requirements in the peak year. Permanent, long-term teacher requirements equal 174 (143.8 percent over baseline needs). With other projects, peak year and long-term requirements increase to 299 and 230 teachers, respectively. There are expected to be 69 teachers needed for short-term construction purposes.

With the first operating base at Milford, the peak year and long-term requirements are 11 percent and 33 percent higher in Beaver County than under the Proposed Action with the second operating base at Milford. Iron County is still expected to receive more spillover effects from Beaver County resulting in higher requirements than under the Proposed Action, although the temporary teacher requirements will be reduced to 9.6 percent of total peak year requirements. The Washington County peak year requirements are 60 percent higher than under the Proposed Action.

ALTERNATIVE 6 (4.3.2.6.1.8)

Alternative 6 differs from the Proposed Action only in the location of the two operating bases. The Proposed Action and Alternative 6 use the same DDA, and as a result at the regional level there are no significant differences. However, there are differences between the Proposed Action and Alternative 6 in Clark, Beaver, Iron and Washington counties.

With the second operating base in Clark County instead of the first operating base, the Clark County peak year teacher requirements drop to 74 percent of the Proposed Action requirements, with a similar drop in the long term, so that under this alternative the peak year requirements are only 2.8 percent above the normal growth baseline. The Beaver County peak year requirements are 11 percent higher and the long-term requirements are 32 percent higher when the first operating base is located at Milford. However, the number of temporary teachers may be expected to be less, 14 teachers or 4.9 percent.

ALTERNATIVE 7 (4.3.2.6.1.9)

Full deployment in Texas/New Mexico will place requirements for educational services primarily within the jurisdiction of the school districts in Curry County, New Mexico, and Hartley and Dallam Counties Texas. The first and second

operating bases will be located in Curry County and Hartley County, respectively. Other school districts within the deployment area will receive varying degrees of project related demands on their educational systems.

Table 4.3.2.6-2 presents the M-X-induced peak year and long-term teacher requirements and percent change over normal growth baseline for Texas and New Mexico. At the regional level project induced enrollments will peak in 1987, generating a need for 935 additional teachers. This contrasts with an M-X induced peak requirement of 826 teachers in the Nevada/Utah region, under the Proposed Action.

Peak enrollments expected in Curry County and Hartley County School Districts will create a potential need for 250 and 169 teachers, respectively, in 1988 and 1989. In Hartley County, this represents an increase of 339.7 percent above the baseline projection for that year. The relative impact on Curry County will be less (47.7 percent), as Curry County contains more urban areas than Hartley. Other counties in which peak year impact requirements represent a large percentage increase over normal growth baseline include Dallam (125.8 percent) and Harding (543.3 percent). Potter and Randall Counties, containing the Amarillo metropolitan area are expected to require almost as many teachers in peak year as Dallam County (i.e., 166 compared to 169), however, the 7.9 percent increase over baseline is insignificant in Potter and Randall counties. The only other counties to experience impacts greater than 13 percent are, in order of severity of impact, Quay (41.3 percent over baseline), Roosevelt (33.3 percent), Bailey (26.1 percent), Parmer (25.4 percent), Moore (19.7 percent) and Deaf Smith (18.9 percent). The absolute number of additional teachers required by M-X in these counties varies from 26 (Bailey) to 67 (Roosevelt).

Subsequent to peak year demands for educational services, out-migration will occur in a number of counties, resulting in a continuing decrease at the regional level in total enrollments and teacher requirements. This pattern will persist until a steady state is reached. Approximately 434 teachers are expected to be required over the long term in the Texas/New Mexico region. This compares to a long-term need for 387 teachers in the Nevada/Utah region under the Proposed Action.

Curry County and Hartley County account for 53 and 32 percent, respectively, of the M-X induced long-term regional requirements. Only four other counties will experience any long-term requirements. In order of severity of impact are Dallam, Moore, Roosevelt and Potter/Randall. Dallam is projected to need 16 teachers, representing a 17 percent increase over baseline.

ALTERNATIVE 8 (4.3.2.6.1.10)

The peak year teacher requirements for the Nevada/Utah deployment region are 43 percent of those required under the Proposed Action, with a similar reduction in the long-term requirements. Under this alternative Nevada will account for 75 percent and Utah only 25 percent of the total regional peak year requirements. Nevada will experience 100 percent of the long-term regional requirements, with Utah requiring no additional teachers after 1988.

Coyote Spring Valley, Nevada and Clovis, New Mexico host the first and second operating bases, respectively. Significant differences between Alternative 8

Table 4.3.2.6-2. (Page 1 of 3)

TEXAS/NEW MEXICO TEACHER REQUIREMENTS

DEPLOYMENT REGION		
	PEAK YEAR	LONG TERM
M-X INDUCED CHANGE (% above normal growth baseline)		
7	935 (10.8)	434 (4.7)
8	525 (6.1)	235 (2.5)

BAILEY COUNTY, TX.		
	PEAK YEAR	LONG TERM
M-X INDUCED CHANGE (% above normal growth baseline)		
7	26 (26.1)	0 (0.0)
8	4 (4.0)	0 (0.0)

CASTRO COUNTY, TX.		
	PEAK YEAR	LONG TERM
M-X INDUCED CHANGE (% above normal growth baseline)		
7	3 (2.3)	0 (0.0)
8	2 (1.6)	0 (0.0)

COCHRAN COUNTY, TX.		
	PEAK YEAR	LONG TERM
M-X INDUCED CHANGE (% above normal growth baseline)		
7	1 (1.6)	0 (0.0)
8	1 (1.6)	0 (0.0)

DALE COUNTY, TX.		
	PEAK YEAR	LONG TERM
M-X INDUCED CHANGE (% above normal growth baseline)		
7	109 (125.8)	16 (17.0)
8	122 (41.6)	0 (0.0)

DEAF SMITH, COUNTY, TX.		
	PEAK YEAR	LONG TERM
M-X INDUCED CHANGE (% above normal growth baseline)		
7	47 (18.9)	0 (0.0)
8	26 (10.7)	0 (0.0)

HALE COUNTY, TX.		
	PEAK YEAR	LONG TERM
M-X INDUCED CHANGE (% above normal growth baseline)		
7	11 (2.3)	0 (0.0)
8	1 (0.2)	0 (0.0)

HARTLEY COUNTY, TX.		
	PEAK YEAR	LONG TERM
M-X INDUCED CHANGE (% above normal growth baseline)		
7	169 (339.7)	139 (255.1)
8	30 (61.5)	0 (0.0)

Table 4.3.2.6-2. (Page 2 of 3)

TEXAS/NEW MEXICO TEACHER REQUIREMENTS

HOCKLEY COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
7	6 (2.3)	0 (0.0)
8	2 (0.8)	0 (0.0)

LAMB COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
7	2 (1.0)	0 (0.0)
8	1 (0.5)	0 (0.0)

LUBBOCK COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
7	50 (1.8)	1 (0.0)
8	32 (1.2)	0 (0.0)

MOORE COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
7	35 (19.7)	16 (8.7)
8	4 (2.3)	0 (0.0)

OLDHAM COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
7	1 (2.9)	0 (0.0)
8	1 (2.9)	0 (0.0)

PARMER COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
7	31 (25.4)	0 (0.0)
8	0 (0.0)	0 (0.0)

POTTER/RANDALL COUNTIES, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
7	166 (7.9)	26 (1.1)
8	42 (2.0)	2 (0.1)

SHERMAN COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
7	7 (12.9)	0 (0.0)
8	0 (0.0)	0 (0.0)

Table 4.3.2.6-2. (Page 3 of 3)

TEXAS/NEW MEXICO

TEACHER REQUIREMENTS

SWISHER COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
7	1 (0.8)	0 (0.0)
8	1 (0.8)	0 (0.0)

CHAVES COUNTY, NM.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
7	55 (8.2)	0 (0.0)
8	53 (7.7)	0 (0.0)

CURRY COUNTY, NM.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
7	250 (47.7)	229 (44.0)
8	247 (47.1)	226 (43.4)

DE BACA COUNTY, NM.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
7	1 (3.3)	0 (0.0)
8	1 (3.4)	0 (0.0)

HARDING COUNTY, NM.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
7	61 (543.3)	0 (0.0)
8	53 (472.1)	0 (0.0)

QUAY COUNTY, NM.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
7	55 (41.3)	0 (0.0)
8	51 (38.3)	0 (0.0)

ROOSEVELT COUNTY, NM.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
7	67 (33.3)	7 (3.4)
8	58 (29.0)	7 (3.4)

UNION COUNTY, NM.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
7	1 (1.8)	0 (0.0)
8	0 (0.0)	0 (0.0)

and the Proposed Action occur in Clark, Eureka, Nye and White Pine counties in Nevada, and Beaver, Iron, Juab, Salt Lake and Washington counties in Utah. The peak year teacher requirements for Clark County are 81 percent of those under the Proposed Action, although the long-term impacts remain the same. The peak year needs are almost halved for Nye County, while White Pine County is expected to need only one additional teacher in the peak year. In Salt Lake, Beaver, Iron and Juab counties, peak year teacher requirements are substantially reduced to only 21, 14, and 5 percent of the requirement for the Proposed Action, respectively. No additional teachers are expected to be needed in Salt Lake, Washington and Eureka counties, compared to small requirements in Salt Lake and Washington, and large requirements in Eureka under the Proposed Action.

Four counties will require a significant number of short-term teachers under Alternative 8. Beaver, Lincoln, Millard and Nye counties will need, respectively, 40.5, 39.5, 32.3 and 29.7 percent, more teachers for a few years.

Texas/New Mexico regional requirements reach 525 teachers, representing a 6.1 percent increase over the normal growth baseline, in peak year 1987. This figure is 56 percent of the full deployment peak year regional requirement under Alternative 7. Curry County will experience the largest teacher requirement, with a peak year requirement totalling 247, a 47.1 percent increase over the baseline needs. Long-term needs are also considerable, requiring a total of 226 teachers. For Curry County, there is almost no difference between Alternative 7 and Alternative 8. Three other counties are projected to experience long-term teacher requirements under this alternative, Roosevelt, Potter and Randall, however, effects are quite insignificant.

Of all of the counties experiencing short-lived education enrollment demands, only a few will receive significant impacts. Those counties in descending order of significance include Hartley and Dallam in Texas, and Harding, Quay and Roosevelt in New Mexico. Harding County needs 53 additional teachers in the peak year. Dallam County will need 122 teachers at the peak, 41.6 percent over baseline. Hartley, Quay and Roosevelt counties are expected to require 30, 51 and 58 additional teachers during the peak year, representing 61.5, 38.3 and 29 percent increases over baseline projections, respectively. The long term teacher requirements expected in Harding, Dallam, Hartley, Quay and Roosevelt counties, are expected to be 82.8, 58.6, 38.4, 27.7, and 19.7 percent of the total personnel projected to be required during the peak year, respectively.

SCHOOL FACILITIES

Nevada/Utah Regional Impacts

Capital investment requirements under the proposed action and the split deployment alternative are presented in Tables 4.3.2.6-3 and 4.3.2.6-4. Information is provided for long term demands, peak year requirements and annual investment required to satisfy long term needs. Total investment requirements are differentiated by type of indebtedness required--general obligation bond items, revenue bond items and school bond items. Details as to the determinants and levels of specific infrastructure items are available in supplemental technical reports.

Long term capital expenditure requirements under the Proposed Action for the Nevada/Utah region total \$58.5 million. Over 68 percent of the total expenditures are for school requirements. Similar patterns hold for peak year expenditures. School expenditure requirements represent the majority of expenditures--approximately 48 percent of the \$218.3 million of total capital expenditures.

Within the Nevada/Utah region, the operating base county locations are expected to constitute the majority of long term capital expenditures. Under the Proposed Action, the operating base counties of Clark, Nevada, and Beaver, Utah, represent over 89 percent of total capital outlays. In the peak year, however, the counties where DDA facilities are expected represent the majority of the \$218.3 million of total capital expenditures (55 percent). These peak year demands, however, could be maintained as temporary facilities with concurrent reduction in the peak year capital requirements. Regional capital expenditure requirements for Alternatives 1 through 6 do not differ significantly from the Proposed Action. Capital expenditures under the split deployment alternative, however, are reduced substantially.

Total capital expenditures in the region under the split deployment alternative are \$27.5 million in the long term, approximately 47 percent of total outlays under the Proposed Action. Peak year expenditure are expected to be \$85.8 million for the split deployment alternative, approximately 39 percent of total peak year proposed action capital expenditures. Table 4.3.2.6-4 presents the capital investment requirements by category for the Nevada/Utah deployment region.

The capital expenditure requirements necessary to support growth due to M-X will be significant for all counties in the Nevada/Utah deployment region. The significant question, however, is not the level of requirements but the ability of the individual counties to finance the long term and peak year capital expenditure requirements.

The previous discussion presenting the expenditure requirements, defines a picture of severe impacts to the region. Due to the low tax base and/or property tax limitations for the counties in the Nevada/Utah region, the operating base counties are unable to finance the bonds necessary to support either long term or peak year capital expenditure requirements.

The non-base counties, having little or no long term effects, will experience difficulties in meeting only temporary peak year demands. The use of temporary facilities coupled with federal assistance can mitigate these problems successfully.

Texas/New Mexico Regional Impacts

This section presents the aggregate revenue and expenditure estimates for all local governments (county, cities, school districts, special districts) in the deployment region for Alternative 7 and split deployment alternative. Education related effects are presented separately as these effects constitute the major portion of the effects presented in the aggregate local government analysis. In addition, peak year and long-term capital expenditure requirements are presented.

Local governments in the deployment region are anticipated to experience varying levels of deficits through the early phases of the project. However, as the tax base expands and the temporary construction work force leaves the area, local government budget levels in the long-term will begin to stabilize near balanced levels. Tables 4.3.2.6-5 and 4.3.2.6-6 present the aggregate expenditure and revenue levels of all local governments within a county area under the low baseline scenario (trend growth baseline) for Alternative 7 and split deployment.

Under Alternative 7, approximately 43.1 percent of the deployment region peak year expenditures attributable to M-X (\$62.5 million in 1987) can be accounted for by the county areas where operating bases are proposed (Curry, Dallam, and Hartley areas). Under the split deployment alternative, peak year expenditures are reduced to approximately \$35.4 million, 56.6 percent of the estimated levels under Alternative 7.

County areas anticipated to experience little or no long-term growth due to M-X but will, experience temporary rapid short-term growth are those areas proposed for DDA facilities. While the number of county areas affected under the split deployment alternative is less than under the full deployment alternative, the county areas of Quay, Roosevelt, Harding, and Deaf Smith will experience similar impacts as found under Alternative 7. The potential for service level degradation in these areas is quite high. Substantial aid would be required to prevent service levels from deteriorating to unacceptable levels. No significant adverse effects are anticipated in the long-term for any of the potentially affected county areas. However, the expenditure level in the Curry County area in the long-term would be approximately 44 percent greater than expenditure levels experienced under baseline conditions under both alternatives.

The effect on the potentially affected school districts follow similar patterns. Under Alternative 7, in-migration of new pupils in the deployment region as a whole in the early phases of the project will increase local education expenditures by approximately \$41.4 million by the peak year of 1987 (Table 4.3.2.6-7). This represents a 12.0 percent increase over baseline expenditure levels in the region as a whole. Local effects, however, are more serious when compared to baseline levels. Bailey, Dallam, Hartley, Moore, Parmer, Curry, Harding, and Roosevelt county areas will all experience significant increases in education-related expenditures in the peak years. With the possibility of local districts not being able to recruit the necessary staff to maintain acceptable student-teacher ratios, these peak year expenditure estimates could be reduced. Under split deployment, peak year (1987) educational related expenditures are reduced to approximately \$24.3 million in the

Table 4.3.2.6-3. (Page 1 of 4)

SCHOOL DISTRICT REVENUES, EXPENDITURES, AND NET IMPACTS (THOUSANDS FY 1987-8) ((1) BASELINE: 1.7%)

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
CLARK													
REVENUES													
WITH 4% P.L. RT4	274820. 0*	294398. 0*	298320. 0*	314278. 62*	329910. 165*	340078. 108*	325684. 905*	317005. 108*	334836. 907*	351151. 957*	362150. 987*	371398. 119*	380161. 119*
STATE LOCAL DIFFERENCE	0. 0. 0. 0.	0. 0. 0. 0.	0. 0. 0. 0.	1604. 2529. 9031. 3166.	1504. 2529. 9031. 3166.	1504. 2529. 9031. 3166.							
PCT. DIFF. NET IMPACT	0.00 0.00	0.00 0.00	0.00 0.00	0.73 2.07	0.73 3.76	0.73 4.51	0.73 4.34	0.73 3.87	0.73 3.12	0.73 4.05	0.73 2.97	0.73 2.84	0.73 2.97
EXPENDITURES													
WITH 4% P.L. RT4	282475. 0*	292937. 0*	304408. 0*	316472. 11*	325815. 11*	334756. 11*	341161. 11*	353468. 11*	362988. 11*	372338. 11*	381691. 11*	390592. 11*	
STATE LOCAL DIFFERENCE	0. 0. 0.	0. 0. 0.	0. 0. 0.	324807. 33349. 11054. 2.63									
PCT. DIFF. NET IMPACT	0.09 0.09	0.09 0.09	0.09 0.09	-578. -578.	-1952. -1150.								
EUROPEA													
REVENUES													
WITH 4% P.L. RT4	623. 623.	635. 635.	646. 650.	662. 710.	674. 1106.	686. 1106.	696. 1106.	710. 1106.	724. 1106.	737. 1106.	750. 1106.	763. 1106.	
STATE LOCAL DIFFERENCE	0. 0. 0.	0. 0. 0.	1. 2.*	11. 37.	92. 172.	558. 1950.	646. 229.	227. 453.	0. 23.	0. 11.	0. 11.	0. 0.	
PCT. DIFF. NET IMPACT	0.00 0.00	0.00 0.00	0.00 0.16	0.16 7.43	0.16 6.11	0.16 3.87	0.16 3.87						
EXPENDITURES													
WITH 4% P.L. RT4	641. 641.	652. 652.	666. 668.	680. 743.	692. 1236.	705. 1363.	718. 1383.	730. 1400.	744. 1417.	757. 1434.	770. 1450.	784. 1464.	
STATE LOCAL DIFFERENCE	0. 0. 0.09	0. 0. 0.09	2. 0.34	63. 0.21	544. 465.27	3219. 527.97	3793. 182.65	4000. 2.41	375. 1.36	375. 1.36	375. 1.36	375. 1.36	
PCT. DIFF. NET IMPACT	0.00 0.	0.00 0.	0.00 0.	-14. -117.	-14. -622.	-14. -622.	-14. -622.	-14. -622.	54. 54.	54. 54.	54. 54.	54. 54.	
LINCOLN													
REVENUES													
WITH 4% P.L. RT4	2131. 2179.	2180. 2366.	2232. 3190.	2289. 4755.	2313. 4029.	2374. 4710.	2461. 3511.	2505. 2967.	2548. 2791.	2581. 2744.	2631. 2749.	2660. 2806.	
STATE LOCAL DIFFERENCE	17. 17.	132. 697.	132. 1281.	200. 1281.	363. 1567.	441. 1567.	570. 1567.	713. 1567.	91. 155.	111. 155.	111. 155.	111. 155.	
PCT. DIFF. NET IMPACT	9.54 -16.	9.54 -16.	9.54 2260.	9.54 2260.	9.54 2260.	9.54 2260.	9.54 2260.	9.54 2260.	9.54 2260.	9.54 2260.	9.54 2260.	9.54 2260.	
EXPENDITURES													
WITH 4% P.L. RT4	2254. 2.86	2400. 2.86	3467. 63.	4481. 2131.	4587. 7589.	4587. 2095.	4587. 85.93	4587. 107.98	4587. 117.98	4587. 117.98	4587. 117.98	4587. 117.98	
STATE LOCAL DIFFERENCE	0. 0.79	0. 0.79	0. 0.79	0. 0.79	0. 0.79	0. 0.79	0. 0.79	0. 0.79	0. 0.79	0. 0.79	0. 0.79	0. 0.79	
PCT. DIFF. NET IMPACT	-31. -16.	-31. -16.	-31. -16.	-165. -165.	-165. -165.	-165. -165.	-165. -165.	-165. -165.	7. 7.	7. 7.	7. 7.	7. 7.	
NYF													
REVENUES													
WITH 4% P.L. RT4	5651. 5651.	5801. 5801.	5952. 6111.	6111. 6111.	6174. 6174.								

Table 4.3.2.6-3. (Page 2 of 4)

Q1 2023 - Q1 2024 Performance Analysis										
Revenue		Profit Margin		Net Income		Operational Efficiency		Financial Health		
Category	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target
Revenue	\$665k	\$675k	4.5%	4.6%	10017.	11023.	10045.	11149.	7051.	7171.
P.L. %	0%	0%	6.8%	6.5%	720.	931.	459.	500.	7077.	7394.
STATS	0%	0%	30.6%	30.7%	1307.	1357.	216.	112.	5%	0%
LOCAL	0%	0%	110.	110.	1116.	1164.	4.	0.	0%	0%
DIFFERENCE	0%	0%	304.	275.	5414.	5141.	940.	116.	5%	0%
PCT. DIFF.	0.0%	0.0%	35.24	47.14	4710.	4319.	51.26	13.88	0.0%	0.0%
EXPENDITURES	\$962.	\$6118.	6284.	6420.	6551.	6426.	5966.	7103.	7242.	7377.
WITHOUT MX	\$962.	\$6118.	8959.	10527.	10779.	12131.	9326.	7113.	7242.	7377.
WITH +4%	\$919.	\$6118.	6516.	5107.	4228.	5501.	184.	0.	0.	0%
DIFFERENCE	0%	0%	394.	2671.	74.55	64.53	92.23	35.62	0.13	0.0%
PCT. DIFF.	0.0%	0.0%	6.51	42.56	92.23	904.	757.	107.	5%	0%
MAX INDUSTRY IMPACT	0%	0%	-520.	-436.	492.	-97.	904.	757.	107.	5%
NET IMPACT	0%	0%	-91.	-436.	492.	-97.	904.	757.	107.	5%
REVENUE PCT. CHANGE	4.25%	4.75%	4986.	4987.	5088.	5181.	5201.	5404.	5506.	5608.
WITHOUT MX	4.70%	4.70%	5825.	5825.	5765.	5617.	5551.	5431.	5506.	5608.
WITH +4%	4.75%	4.75%	0%	210.	661.	209.	107.	107.	0.	0%
P.L. %	9.74%	0%	0%	730.	2117.	792.	419.	12.	0.	0%
STATS	0%	0%	0%	0%	0.	339.	3177.	403.	126.	15.
LOCAL	0%	0%	0%	0%	3316.	2178.	995.	267.	27.	0%
DIFFERENCE	0%	0%	0%	0%	66.50	42.80	17.29	4.95	0.50	0.0%
PCT. DIFF.	0.0%	0.0%	0.0%	0.0%	19.23	66.50	42.80	17.29	4.95	0.0%
EXPENDITURES	4851.	4903.	4959.	5022.	5176.	5230.	5326.	5339.	5554.	5764.
WITHOUT MX	4851.	4903.	4959.	5022.	5070.	6693.	5896.	5512.	5554.	5659.
WITH +4%	4851.	4903.	0%	1233.	3481.	1468.	571.	73.	0.	0%
DIFFERENCE	0%	0%	0.0%	0.0%	24.56	75.71	27.49	10.72	1.16	0.0%
PCT. DIFF.	0.0%	0.0%	0.0%	0.0%	0.	0.	0.	0.0%	0.0%	0.0%
MAX INDUSTRY NET IMPACT	0%	0%	0%	0%	-294.	-564.	714.	375.	188.	27.
OPERATING EXPENSES	2477.	2541.	2612.	2684.	2720.	2744.	2769.	2794.	2845.	2881.
WITHOUT MX	2477.	2541.	2660.	4611.	4154.	11093.	12580.	13113.	11066.	10766.
WITH +4%	2477.	2541.	0%	39.	307.	1244.	1910.	2351.	2370.	2761.
P.L. %	8.74%	0%	0%	107.	1027.	2988.	3925.	1910.	5447.	477.
STATS	0%	0%	0%	0%	591.	1402.	2614.	2172.	1735.	1082.
LOCAL	0%	0%	0%	0%	354.	1925.	5334.	3411.	1254.	1081.
DIFFERENCE	0%	0%	0.0%	0.0%	71.67	207.13	104.71	154.31	176.51	273.74
PCT. DIFF.	1.0%	0.0%	1.311	0.0%	0.	0.	0.	0.	0.	0.
EXPERIMENTAL EXPENSES	2497.	2631.	2708.	2742.	2767.	2802.	2817.	2840.	2940.	2982.
WITHOUT MX	2497.	2631.	2562.	3192.	5218.	8096.	11048.	12075.	11885.	10582.
WITH +4%	2497.	2631.	0%	0%	2509.	6754.	4821.	3275.	9345.	7710.
DIFFERENCE	0%	0%	0.0%	0.0%	72.67	212.67	130.45	116.90	293.84	268.82
PCT. DIFF.	0.0%	0.0%	0.0%	0.0%	0.	0.	0.	0.	0.	0.
MAX INDUSTRY PCT. IMPACT	0%	0%	0%	0%	-201.	-584.	-670.	68.	585.	501.
OPERATING EXPENSES	10100.	10449.	10820.	11123.	11351.	11622.	11995.	12175.	12398.	12628.
WITHOUT MX	10100.	10449.	10445.	11609.	12341.	17439.	13126.	11290.	13601.	13628.
WITH +4%	10100.	10449.	0%	0%	75.	146.	136.	573.	623.	172.
P.L. %	9.74%	0%	0%	0%	10.	10.	10.	40.	30.	160.
STATS	0%	0%	0%	0%	51.	109.	407.	448.	30.	150.
LOCAL	0%	0%	0%	0%	64.	115.	270.	1231.	1115.	940.
DIFFERENCE	0%	0%	0.0%	0.0%	0.60	0.60	0.7.	10.24	11.35	0.15
PCT. DIFF.	0.0%	0.0%	0.0%	0.0%	0.	0.	0.	0.	0.	0.
MAX INDUSTRY PCT. IMPACT	0%	0%	0%	0%	-201.	-584.	-670.	68.	585.	501.

Table 4.3.2.6-3. (Page 3 of 4)

PCT. DIFF.	0.07	0.00	0.00	0.05	0.24	0.01	0.07	0.37	0.01	0.75	0.67	0.59
W/ INDUCTION	0.	0.	0.	-19.	-19.	-19.	-19.	-19.	-19.	120.	118.	118.
NET IMPACT	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
JUAN REVENUES	3188.	3332.	3400.	3663.	3823.	3926.	3986.	4120.	4189.	4245.	4295.	4295.
WITH W/	3188.	3332.	3400.	3811.	4912.	6170.	5328.	4101.	4129.	4149.	4245.	4245.
P.L. R74	0.	0.	0.	40.	469.	149.	5.	0.	0.	0.	0.	0.
STATS	0.	0.	0.	109.	1311.	415.	26.	0.	0.	0.	0.	0.
L.CAL.	0.	0.	0.	0.	76.	566.	285.	10.	0.	0.	0.	0.
DIFFERENCE	0.	0.	0.	148.	1146.	1492.	1347.	105.	10.	0.	0.	0.
PCT. DIFF.	0.01	0.00	0.00	4.05	31.46	31.38	31.21	7.91	0.24	0.00	0.00	0.03
EXPENDITURES	1214.	3359.	3514.	3693.	3777.	3855.	3939.	4019.	4101.	4163.	4221.	4290.
WITHOUT W/	1214.	3359.	3519.	3400.	5377.	6393.	4742.	4016.	4101.	4163.	4223.	4280.
WITH W/	0.	0.	0.	214.	1670.	2538.	404.	27.	0.	0.	0.	0.
DIFFERENCE	0.	0.	0.	5.89	42.37	65.85	20.42	0.67	0.00	0.00	0.00	0.01
PCT. DIFF.	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
W/ INDUCTION	0.	0.	0.	-66.	-414.	-191.	698.	288.	10.	0.	0.	0.
NET IMPACT	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W/ INDUCTION	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
REVENUES	5179.	5325.	5561.	5918.	5952.	6079.	6212.	6345.	6474.	6533.	6582.	6662.
WITH W/	5179.	5325.	5561.	7147.	7044.	8132.	8054.	8258.	8286.	8573.	6622.	6662.
P.L. R74	0.	0.	0.	378.	331.	372.	561.	212.	6.	6.	6.	6.
STATS	0.	0.	0.	206.	1045.	1047.	1567.	523.	31.	15.	15.	15.
L.CAL.	0.	0.	0.	0.	207.	724.	634.	714.	1078.	412.	18.	18.
DIFFERENCE	0.	0.	0.	404.	1620.	1993.	2053.	2842.	1313.	449.	40.	39.
PCT. DIFF.	0.00	0.00	0.00	7.26	28.01	33.48	33.77	35.74	39.15	6.94	0.61	0.60
EXPENDITURES	5151.	5368.	5607.	5865.	6000.	6129.	6263.	6397.	6530.	6586.	6682.	6717.
WITHOUT W/	5151.	5368.	5607.	2009.	2090.	8462.	9294.	7537.	4559.	6665.	6711.	6746.
WITH W/	0.	0.	0.	0.	0.	1770.	2013.	3031.	1140.	29.	29.	29.
DIFFERENCE	0.	0.	0.	0.	0.	34.84	75.83	32.03	17.83	0.44	0.43	0.43
PCT. DIFF.	0.00	0.00	0.00	10.91	-414.	703.	41.	-190.	773.	421.	11.	11.
W/ INDUCTION	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NET IMPACT	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SALT LAKE/UTAH REVENUES	465965.	482838.	501429.	521509.	537752.	542864.	553561.	563410.	571051.	583237.	592440.	608711.
WITHOUT W/	465865.	482838.	501429.	501479.	571509.	534771.	546951.	550097.	565103.	571421.	581237.	592440.
P.L. R74	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
STATS	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
L.CAL.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
DIFFERENCE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EXPENDITURES	169670.	486806.	505510.	525194.	537131.	547375.	568110.	585411.	578567.	59110.	591317.	61374.
WITHOUT W/	167690.	486806.	505550.	505550.	525794.	540446.	54559.	568441.	578567.	591309.	44512.	61374.
WITH W/	0.	0.	0.	0.	0.	3318.	1877.	7679.	0.	0.	0.	0.
DIFFERENCE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
W/ INDUCTION	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NET IMPACT	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
WASHINGTON REVENUES	12797.	13324.	13897.	14464.	14770.	15270.	15670.	16122.	16565.	16107.	17255.	17612.
WITHOUT W/	12727.	13324.	13897.	14164.	14165.	15270.	15470.	16174.	16174.	17121.	17156.	17612.
P.L. R74	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
STATS	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
L.CAL.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
DIFFERENCE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
W/ INDUCTION	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NET IMPACT	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

Table 4.3.2.6-3. (Page 4 of 4)

LOCAL	0.	0.	0.	0.	103.	161.	153.	121.	69.	55.	53.	52.
DIFFERENCE	0.	0.	0.	0.	103.	250.	253.	171.	114.	131.	99.	35.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.69	1.63	1.85	1.57	1.05	0.68	0.58	0.51
EXPENDITURES												
WITHOUT MX	12832.	13433.	13996.	14583.	14984.	15396.	15819.	16254.	16701.	17046.	17397.	17756.
WITH MX	12832.	13433.	13996.	14583.	15153.	15662.	16151.	16814.	17136.	17416.	17841.	18123.
DIFFERENCE	0.	0.	0.	0.	0.	69.	266.	252.	200.	113.	91.	85.
PCT. DIFF.	0.00	0.00	0.00	0.00	1.13	1.73	1.53	1.73	0.68	0.53	0.51	0.46
MX IMPACT	0.	0.	0.	0.	-66.	-16.	47.	51.	60.	74.	12.	14.
NET IMPACT												17.
REGIONAL TOTAL												
REVENUES												
WITHOUT MX	787174.	815861.	847237.	880606.	902370.	922338.	943401.	963945.	984512.	1003703.	1023316.	104356.
WITH MX	747221.	816n62.	851421.	874n63.	936739.	967009.	988180.	999754.	1009173.	1024630.	104356.	1058041.
P.L. R74	11.	37.	1040.	3032.	5014.	7141.	4097.	7704.	6738.	6738.	6737.	6737.
STAFF	37.	132.	2425.	8608.	16440.	2422.	25138.	19550.	12450.	11709.	11212.	11196.
LOCAL	0.	17.	722.	3618.	10015.	13319.	11744.	7760.	4473.	2881.	2270.	2263.
DIFFERENCE	17.	186.	4187.	15258.	33169.	44611.	44979.	35114.	28661.	20727.	20720.	20704.
PCT. DIFF.	0.01	0.02	0.49	1.73	3.81	4.84	4.77	3.64	2.40	2.06	1.98	1.94
EXPENDITURES												
WITHOUT MX	799297.	828405.	860283.	894364.	916290.	936584.	959020.	978916.	998940.	1019572.	1039332.	105603.
WITH MX	799300.	828624.	865738.	916670.	955295.	978756.	984412.	100209.	102011A.	103923.	105897.	109232.
DIFFERENCE	63.	219.	5455.	19306.	3905.	42198.	43392.	27293.	20578.	19622.	19610.	19630.
PCT. DIFF.	n.01	0.03	0.63	2.16	4.26	4.51	4.22	2.79	2.06	1.93	1.89	1.86
MX IMPACT	-16.	-31.	-1768.	-4048.	-4636.	2473.	4587.	7920.	3083.	1066.	580.	567.
NET IMPACT												

30-OCT-80

SOURCE: HON SCIENCES
 (1) ESTIMATES REFLECT AGGREGATE REVENUES AND EXPENDITURES BY ALL SCHOOL DISTRICTS WITHIN THE COUNTY.

Table 4.3.2.6-4. (Page 1 of 4)

SCHOOL DISTRICT REVENUES, EXPENDITURES, AND NET IMPACTS (THOUSANDS FY 1981 \$) (1) ACTUAL: HIGH
PROJECTED: ACTUAL

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
CIAKA													
REVENUES													
WITHIN MX	274936.	285200.	296464.	308447.	31747.	326133.	335612.	344100.	351571.	362595.	371810.	380571.	399745.
WITH 4%	274936.	285200.	296464.	310113.	343061.	357630.	364502.	373624.	382440.	391680.	399745.	400295.	
P.L. 974	0.	0.	625.	1265.	2529.	3154.	3779.	3779.	3779.	3779.	3779.	3779.	
STAFF	0.	0.	1087.	2776.	6178.	9223.	2082.	8350.	6574.	6574.	6574.	6574.	
I.T.CAI.	0.	0.	447.	2332.	3127.	2245.	565.	677.	677.	677.	677.	677.	
DIFPMVFC	0.	0.	2159.	6373.	11402.	14680.	14511.	13206.	11010.	11010.	11010.	11010.	
DCT. DIFF.	0.	0.	0.	2.07	4.50	3.74	4.33	3.86	3.12	3.04	2.91	2.91	
DEPENDENT'S	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
WITHIN MX	282534.	293114.	304224.	317038.	326495.	315423.	348775.	353372.	363421.	372695.	382167.	391251.	400108.
WITH 4%	282534.	293144.	304257.	319536.	325462.	348560.	357695.	364771.	374222.	383455.	392467.	402551.	410904.
PCT. DIFF.	0.07	3.00	0.99	2.73	8322.	13041.	1137.	10901.	10901.	10901.	10901.	10901.	
NET IMPACT	0.	0.	-574.	-1050.	-1149.	1541.	1611.	2104.	279.	229.	229.	229.	
EUREKA													
REVENUES													
WITHIN MX	621.	645.	662.	674.	686.	639.	710.	724.	737.	750.	763.	774.	
WITH 4%	621.	645.	650.	710.	1106.	3343.	1544.	2011.	1121.	748.	751.		
P.L. 974	0.	0.	1.	11.	92.	558.	646.	227.	0.	0.	0.	0.	
STAFF	0.	0.	7.	17.	172.	1950.	2293.	553.	23.	11.	1.	0.	
I.T.CAI.	0.	0.	0.	1.	1.	149.	900.	1941.	315.	1.	0.	0.	
DIFPMVFC	0.	0.	2.	49.	412.	2657.	1845.	2211.	358.	12.	1.	0.	
DCT. DIFF.	0.00	1.00	0.36	7.31	64.05	387.21	550.39	798.50	54.95	1.57	0.18	0.00	
DEPENDENT'S	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
WITHIN MX	641.	653.	666.	680.	693.	705.	718.	730.	744.	757.	771.	784.	
WITH 4%	641.	653.	668.	743.	1237.	3984.	5523.	2664.	762.	759.	771.	784.	
PCT. DIFF.	0.	0.	2.	63.	544.	3279.	3791.	1341.	18.	2.	0.	0.	
NET IMPACT	0.00	1.00	0.34	0.21	78.47	464.84	517.97	182.65	2.41	0.30	0.00	0.00	
LINDGREN													
REVENUES													
WITHIN MX	2131.	2191.	2233.	2297.	2436.	2778.	2477.	2464.	2507.	2540.	2593.	2634.	2672.
WITH 4%	2179.	2367.	3191.	4255.	4032.	4733.	3545.	2065.	2744.	2744.	2771.	2804.	2847.
P.L. 974	11.	37.	200.	441.	363.	441.	357.	97.	12.	11.	11.	11.	
STAFF	37.	132.	697.	1281.	1564.	1284.	310.	213.	165.	110.	97.	93.	
I.T.CAI.	0.	17.	60.	322.	587.	714.	656.	200.	74.	72.	72.	71.	
DIFPMVFC	47.	186.	957.	1986.	2506.	1173.	501.	706.	196.	178.	175.	175.	
DCT. DIFF.	2.71	4.54	12.47	45.74	111.10	99.07	98.35	20.33	11.47	7.64	6.87	6.54	
NET IMPACT	-16.	-19.	-715.	-165.	6.	761.	171.	103.	1.	0.	0.	0.	
PRECEDING PAGE BLANK-NOT FILLED													
REVENUES													
WITHIN MX	5661.	5911.	5953.	6117.	6151.	6174.	6512.	6541.	6710.	6716.	7040.	7180.	7207.

Table 4.3.2.6-4. (Page 2 of 4)

WITH MX	5661.	5801.	6275.	10022.	11087.	11926.	10708.	7719.	7710.	7054.	7180.	7307.
P.L. R74	0.	0.	456.	720.	931.	958.	0.	0.	0.	0.	0.	0.
STAFF	0.	0.	236.	1067.	2587.	3307.	1357.	276.	117.	5.	0.	0.
L.CAL.	0.	0.	189.	1402.	1402.	1176.	1588.	654.	4.	0.	0.	0.
DIFFERENCE	0.	0.	110.	4671.	4710.	5144.	3101.	940.	116.	5.	0.	0.
PCT. DIFF.	0.00	0.00	304.	35.22	74.71	73.85	93.14	51.24	13.87	1.67	0.00	0.00
EXPENDITURES												
WITHOUT MX	5819.	5963.	6119.	6287.	6475.	6555.	6620.	6968.	7107.	7245.	7380.	7510.
WITH MX	5819.	5963.	6517.	8361.	11532.	10783.	12195.	9328.	7151.	7116.	7245.	7510.
STATE	0.	0.	0.	0.	197.	186.	52.	0.	0.	0.	0.	0.
L.CAL.	0.	0.	684.	7254.	708.	270.	25.	0.	0.	0.	0.	0.
DIFFERENCE	0.	0.	0.	0.	318.	1092.	315.	94.	0.	2.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.00	881.	3214.	1986.	6317.	109.	0.	0.	0.
NET INDUCED					12.00	38.52	20.92	6.94	1.30	0.00	0.00	0.00
WHITE PINE												
REVENUES												
WITHOUT MX	4726.	4773.	4951.	7146.	8340.	9491.	9166.	9366.	7870.	8037.	8217.	8362.
WITH MX	4726.	4773.	4951.	8227.	11558.	11479.	8803.	8415.	7870.	8037.	8217.	8362.
P.L. R74	0.	0.	0.	197.	6443.	186.	52.	0.	0.	0.	0.	0.
STATE	0.	0.	0.	684.	7254.	708.	270.	25.	0.	0.	0.	0.
L.CAL.	0.	0.	0.	0.	318.	1092.	315.	94.	0.	2.	0.	0.
DIFFERENCE	0.	0.	0.	0.	881.	3214.	1986.	6317.	109.	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.00	12.00	38.52	20.92	6.94	1.30	0.00	0.00	0.00
NET IMPACT	0.	0.	0.	-520.	-436.	482.	-87.	904.	757.	107.	5.	0.
NET INDUCED												
WHITE PINE												
REVENUES												
WITHOUT MX	3492.	4607.	5230.	5846.	6372.	5330.	5166.	5219.	5299.	5387.	5472.	5560.
WITH MX	3492.	4607.	5551.	7701.	11917.	13590.	14904.	15659.	14475.	13352.	13321.	13410.
P.L. R74	0.	0.	33.	300.	1231.	1801.	2343.	2912.	2778.	2777.	2777.	2777.
STATE	0.	0.	92.	995.	2936.	3887.	4878.	5415.	4699.	4333.	4014.	4014.
L.CAL.	0.	0.	196.	196.	1372.	2577.	2518.	2122.	1707.	1072.	1071.	1070.
DIFFERENCE	0.	0.	0.	371.	1856.	5540.	8260.	9738.	10449.	9176.	8182.	7863.
PCT. DIFF.	0.00	0.00	6.13	31.74	88.93	154.28	188.50	200.21	173.17	151.89	143.68	141.41
EXPENDITURES												
WITHOUT MX	3511.	4645.	5273.	5894.	6425.	5374.	5209.	5262.	5343.	5431.	5517.	5605.
WITH MX	3511.	4645.	5776.	8333.	12586.	13580.	13374.	14372.	13616.	13124.	13209.	13356.
STATE	0.	0.	503.	2939.	6161.	8215.	8166.	9110.	8408.	7593.	7691.	7691.
L.CAL.	0.	0.	9.54	41.39	95.80	152.87	115.97	184.54	155.42	141.65	119.40	137.71
DIFFERENCE	0.00	0.00	0.00	-183.	-584.	-627.	45.	572.	139.	499.	171.	170.
NET IMPACT	0.	0.	0.									
NET INDUCED												
WHITE PINE												
REVENUES												
WITHOUT MX	9810.	10139.	10504.	10701.	11185.	11431.	11634.	11961.	12234.	12458.	12690.	13123.
WITH MX	9810.	10139.	10504.	10495.	11628.	12419.	12882.	13192.	14147.	13161.	13669.	14096.
P.L. R74	0.	0.	0.	0.	3.	75.	116.	135.	160.	140.	160.	160.
STATE	0.	0.	0.	0.	240.	464.	568.	623.	557.	472.	451.	449.
L.CAL.	0.	0.	0.	0.	51.	198.	408.	484.	395.	370.	368.	365.
DIFFERENCE	0.	0.	0.	0.	64.	514.	988.	1211.	1111.	100.	978.	971.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.58	4.59	8.64	11.15	10.29	8.05	7.72	7.56
EXPENDITURES												
WITHOUT MX	9891.	10222.	10590.	10991.	11277.	11525.	11730.	12052.	12334.	12560.	12794.	13119.
WITH MX	9891.	10222.	10590.	11097.	11374.	11532.	11875.	12124.	12420.	12454.	12654.	13046.
PCT. DIFF.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

Table 4.3.2.6-4. (Page 3 of 4)

PCT. DIFF.	0.00	7.00	0.00	0.02	6.18	0.71	9.23	0.86	7.34	6.88	6.77	6.59	6.47
MX INDUCED	0.	0.	0.	0.	-17.	-1H1.	-1A.	1n3.	163.	20A.	140.	119.	11R.
NFT IMPACT	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
JUAN													
REVENUES													
WITHOUT MX	3476.	4094.	1514.	4932.	4913.	5015.	3961.	4761.	4448.	4517.	4585.	4651.	4706.
WITH MX	4476.	4094.	4539.	5770.	6105.	7247.	5441.	5266.	4455.	4517.	4585.	4651.	4706.
P.L. H74	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
STATE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
LOCAL	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
DIFFERENCE	0.	0.	0.	0.	136.	1172.	2333.	1480.	304.	7.	0.	0.	0.
PCT. DIFF.	0.0%	0.0%	0.0%	0.0%	2.81	23.76	46.52	29.81	5.39	0.16	0.00	0.00	0.00
EXPENDITURES													
WITHOUT MX	3504.	4128.	1526.	4772.	4973.	5056.	5002.	4801.	4444.	4554.	4673.	4689.	4744.
WITH MX	3504.	4128.	4576.	5172.	6559.	7582.	5794.	4819.	4484.	4554.	4623.	4689.	4744.
DIFFERENCE	0.	0.	0.	0.	201.	1586.	2576.	792.	19.	0.	0.	0.	0.
PCT. DIFF.	0.0%	0.0%	0.0%	0.0%	4.07	31.88	49.96	15.R3	0.39	0.00	0.00	0.00	0.00
MX INDUCED													
NFT IMPACT	0.	0.	0.	0.	-57.	-414.	-193.	68A.	28A.	7.	0.	0.	0.
MILLARD													
REVENUES													
WITHOUT MX	6328.	6738.	6424.	9769.	9837.	10037.	9756.	9583.	7934.	8012.	8101.	8178.	8245.
WITH MX	6328.	6738.	6814.	11577.	11902.	12065.	12567.	10468.	8372.	846.	8135.	8211.	8278.
P.L. H74	0.	0.	0.	105.	104.	327.	367.	555.	20R.	5.	5.	5.	5.
STATE	0.	0.	0.	288.	1034.	977.	1033.	1552.	612.	29.	13.	13.	13.
LOCAL	0.	0.	0.	201.	716.	627.	704.	1265.	403.	15.	15.	15.	15.
DIFFERENCE	0.	0.	0.	393.	1697.	1970.	2027.	2811.	1486.	36.	34.	33.	33.
PCT. DIFF.	0.0%	0.0%	0.0%	4.67	16.14	20.04	20.20	2A.81	21.97	5.52	0.42	0.41	0.40
EXPENDITURES													
WITHOUT MX	6380.	6793.	8494.	10051.	9913.	10120.	9837.	8553.	7999.	8078.	8168.	8245.	8312.
WITH MX	6380.	6793.	9663.	12071.	11682.	12107.	12837.	9775.	8024.	8103.	8192.	8270.	8337.
DIFFERENCE	0.	0.	0.	569.	2021.	1769.	1988.	3000.	1122.	25.	25.	25.	25.
PCT. DIFF.	0.0%	0.0%	0.0%	6.70	20.11	37.85	19.64	30.53	12.96	0.31	0.31	0.30	0.30
MX INDUCED													
NET IMPACT	0.	0.	-176.	-417.	201.	40.	-190.	764.	413.	9.	9.	R.	R.
SALT LAKE/UTAH													
REVENUES													
WITHOUT MX	166617.	484167.	503531.	524924.	536635.	546697.	557062.	566576.	576091.	585591.	594903.	594911.	603517.
WITH MX	166617.	484167.	503531.	524924.	538134.	550749.	565758.	567954.	576091.	585591.	594903.	594911.	603517.
P.L. H74	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
STATE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
LOCAL	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
DIFFERENCE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PCT. DIFF.	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.74	0.63	0.23	0.00	0.00	0.00
EXPENDITURES													
WITHOUT MX	470457.	488146.	507667.	529238.	540914.	551190.	561640.	571232.	581826.	590106.	593792.	600477.	616601.
WITH MX	470457.	488146.	507667.	529238.	544229.	555034.	561030.	571227.	580826.	590406.	593792.	600477.	616601.
DIFFERENCE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PCT. DIFF.	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.70	0.44	0.00	0.00	0.00	0.00
MX INDUCED													
NFT IMPACT	0.	0.	0.	0.	0.	0.	-17R6.	2014.	127A.	0.	0.	0.	0.
WASHINGTRN													
REVENUES													
WITHOUT MX	12747.	13324.	13982.	14463.	14352.	15270.	15690.	16122.	1655.	16907.	1725.	17612.	17975.
WITH MX	12747.	13324.	13982.	14463.	14463.	15270.	15690.	16122.	1655.	16907.	1725.	17612.	17975.
P.L. H74	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
STATE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

Table 4.3.2.6-4. (Page 4 of 4)

	LOCAL	0.	0.	0.	0.	103.	161.	153.	121.	69.	55.	53.	52.	50.
DIFFERENCE	0.	0.	0.	0.	0.	295.	292.	253.	173.	111.	101.	98.	95.	95.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.00	0.60	1.63	1.85	1.57	1.05	0.68	0.58	0.56	0.53
EXPENDITURES														
WITHOUT MX	12632.	13433.	13996.	14591.	14904.	15306.	15814.	16254.	16701.	17046.	17397.	17756.	18123.	
WITH MX	12692.	13433.	13996.	14593.	15153.	15662.	16070.	16454.	16114.	17136.	17466.	17841.	18205.	
DIFFERENCE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	R2.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46
MX INDUCED														
NET IMPACT	0.	0.	0.	0.	0.	-66.	-16.	40.	53.	60.	24.	12.	14.	17.
REGULATORY TOTAL														
REVENUES														
WITHOUT MX	790577.	821659.	856362.	895898.	918071.	939048.	958562.	975786.	994024.	1013706.	1033426.	1052018.	1069502.	
WITH MX	790624.	821844.	860498.	910988.	953072.	983345.	1001115.	1010515.	101755.	1033617.	1034342.	1053617.	1072191.	1089748.
P.L. #14	11.	11.	1032.	5871.	5871.	7101.	8060.	7680.	6733.	6733.	6733.	6733.	6733.	6733.
STATS	37.	37.	137.	2407.	8507.	18799.	24042.	24910.	19179.	12417.	11685.	11201.	11187.	11184.
LOCAL	0.	0.	17.	703.	3577.	9955.	13154.	11584.	7610.	4411.	2264.	2257.	2257.	2257.
DIFFERENCE	47.	47.	146.	4136.	15090.	34102.	44297.	45554.	34829.	21567.	20686.	20191.	20191.	20191.
PCT. DIFF.	0.01	0.01	0.02	0.48	1.68	3.71	4.72	4.65	3.57	2.37	2.04	1.95	1.92	1.89
EXPENDITURES														
WITHOUT MX	902731.	834274.	869492.	909640.	933106.	953545.	973395.	990024.	1003467.	1029515.	1049586.	1068510.	1086394.	
WITH MX	90279.	834493.	874870.	928149.	971620.	995334.	1013411.	1018053.	103019.	1049156.	1067203.	108821.	1106001.	
DIFFERENCE	63.	219.	5378.	19109.	3872.	41789.	40016.	27129.	20533.	19641.	19617.	19607.	19607.	
PCT. DIFF.	0.01	0.03	0.62	2.10	4.15	4.38	4.31	2.74	2.03	1.91	1.87	1.84	1.83	
MX INDUCED														
NET IMPACT	-16.	-33.	-1242.	-4019.	-4672.	2508.	4517.	7701.	3070.	1045.	573.	562.	559.	

SOURCE: HOW SCIENCES

(1) ESTIMATES REFLECT AGGREGATE REVENUES AND EXPENDITURES BY ALL SCHOOL DISTRICTS WITHIN THE COUNTY.

30-OCT-83

Table 4.3.2.6-5. (Page 1 of 6)

LOCAL GOVERNMENT REVENUES, EXPENDITURES, AND NET IMPACTS (THOUSANDS FY 1980-81) (1) BASELINE: LOW

ALTERNATIVE 7

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BAILEY													
REVENUES													
WITHOUT MX	4232.	4248.	4263.	4283.	4303.	4313.	4328.	4343.	4358.	4373.	4380.	4380.	4380.
WITH MX	4232.	4248.	4263.	4283.	4291.	4291.	4296.	4293.	4293.	4291.	4281.	4280.	4280.
DIFFERENCE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.13	0.13	0.36	12.36	23.60	17.05	4.48	0.46	0.01	0.00
EXPENDITURES													
WITHOUT MX	4242.	4277.	4292.	4314.	4322.	4337.	4352.	4367.	4382.	4389.	4389.	4389.	4389.
WITH MX	4242.	4277.	4292.	4306.	4295.	7261.	8134.	7294.	6456.	6389.	6389.	6389.	6389.
DIFFERENCE	0.	0.	0.	14.	570.	570.	1817.	942.	89.	3.	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.22	9.03	14.89	28.68	14.83	1.40	0.04	0.00	0.00	0.00
MIX INDUCED				-6.	-169.	-158.	-324.	140.	196.	26.	1.	0.	0.
NET IMPACT	0.	0.	0.	-6.	-169.	-158.	-324.	140.	196.	26.	1.	0.	0.
CASSTRO													
REVENUES													
WITHOUT MX	7934.	7964.	7994.	8024.	8031.	8034.	8144.	8204.	8264.	8324.	8379.	8474.	8549.
WITH MX	7934.	7964.	7994.	8024.	8193.	8346.	8377.	8336.	8336.	8339.	8399.	8474.	8549.
DIFFERENCE	0.	0.	0.	0.	0.	13.	106.	173.	72.	15.	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.	0.16	1.39	2.65	2.11	0.87	0.17	0.00	0.00
EXPENDITURES													
WITHOUT MX	7945.	7976.	8006.	8043.	8076.	8156.	8216.	8276.	8326.	8412.	8487.	8562.	8637.
WITH MX	7945.	7976.	8006.	8046.	8066.	8275.	8422.	8351.	8316.	8412.	8487.	8562.	8637.
DIFFERENCE	0.	0.	0.	0.	0.	23.	179.	266.	135.	40.	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.	0.29	2.21	3.26	1.64	0.49	0.00	0.00	0.00
MIX INDUCED				-10.	-69.	-90.	-39.	32.	15.	0.	0.	0.	0.
NET IMPACT	0.	0.	0.	-10.	-69.	-90.	-39.	32.	15.	0.	0.	0.	0.
COCHRAN													
REVENUES													
WITHOUT MX	3903.	3903.	3903.	3903.	3903.	3903.	3903.	3903.	3903.	3903.	3926.	3956.	3986.
WITH MX	3903.	3903.	3903.	3919.	3948.	3974.	3994.	3963.	3924.	3924.	3926.	3956.	3986.
DIFFERENCE	0.	0.	0.	0.	16.	45.	70.	59.	21.	2.	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.	0.40	1.16	1.60	1.52	0.93	0.04	0.00	0.00	0.00
EXPENDITURES													
WITHOUT MX	3909.	3909.	3909.	3909.	3909.	3909.	3909.	3909.	3909.	3909.	3931.	3961.	3992.
WITH MX	3909.	3909.	3909.	3936.	3970.	3993.	3959.	3913.	3909.	3909.	3931.	3961.	3992.
DIFFERENCE	0.	0.	0.	0.	28.	61.	84.	51.	4.	0.	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.	0.71	1.57	2.16	1.29	0.10	0.00	0.00	0.00	0.00
MIX INDUCED				-12.	-16.	-14.	9.	17.	2.	0.	0.	0.	0.
NET IMPACT	0.	0.	0.	-12.	-16.	-14.	9.	17.	2.	0.	0.	0.	0.
DALLAM													
REVENUES													
WITHOUT MX	4412.	4466.	4720.	4780.	4828.	4881.	4935.	4989.	5030.	5124.	5205.	5285.	5366.
WITH MX	4412.	4466.	4885.	5780.	7681.	10050.	11683.	10088.	7809.	6757.	6415.	6422.	6500.
DIFFERENCE	0.	0.	0.	165.	1000.	2794.	5179.	6748.	5099.	2759.	1635.	1211.	1137.
PCT. DIFF.	0.00	0.00	0.	3.50	20.92	57.87	106.09	136.72	102.21	54.64	31.91	23.26	21.51
EXPENDITURES													
WITHOUT MX	4811.	4867.	4923.	4986.	5035.	5092.	5148.	5204.	5267.	5345.	5429.	5513.	5597.
WITH MX	4811.	4867.	5212.	6378.	8559.	11031.	12182.	9606.	7372.	6610.	6512.	6590.	6674.
DIFFERENCE	0.	0.	0.	287.	1391.	3473.	5939.	7034.	4402.	1263.	1083.	1077.	1077.
PCT. DIFF.	0.00	0.00	0.	5.87	27.90	69.37	116.63	136.63	84.58	39.95	23.67	19.93	19.93
MIX INDUCED	0.	0.	-124.	-391.	-700.	-761.	-286.	698.	655.	370.	128.	60.	58.
NET IMPACT	0.	0.	-124.	-391.	-700.	-761.	-286.	698.	655.	370.	128.	60.	58.

Table 4.3.2.6-5. (Page 2 of 6)

BEAUF SMITH															
REVENUES															
WITHOUT MX	14989	15025	15200	15312	15470	15635	15800	15965	16138	16326	16521	16716	16911	16911	16911
WITH MX	14989	15095	15200	15404	15764	16794	18473	17991	16524	16356	16321	16716	16716	16716	16716
DIFFERENCE	0	0	0	0	0	0	294	1159	2673	2026	486	19	0	0	0
PCT. DIFF.	0.00	0.00	0.00	0.00	0.60	1.90	7.41	16.91	12.69	3.01	0.12	0.00	0.00	0.00	0.00
EXPENDITURES															
WITHOUT MX	15281	15388	15495	15610	15771	15939	16107	16276	16452	16613	16842	17041	17240	17240	17240
WITH MX	15281	15388	15495	15776	16193	17488	19449	18097	16506	16643	16842	17041	17240	17240	17240
DIFFERENCE	0	0	0	0	0	0	165	422	3341	54	0	0	0	0	0
PCT. DIFF.	0.00	0.00	0.00	0.00	1.06	2.68	9.72	20.74	11.19	0.33	0.00	0.00	0.00	0.00	0.00
MX INDUCED EXPENDITURE															
NET IMPACT	0	0	0	0	0	-74	-128	-390	-669	204	432	19	0	0	0
HALE															
REVENUES															
WITHOUT MX	28583	28883	29191	29499	29806	30114	30429	30752	31087	31465	31863	32268	32681	32681	32681
WITH MX	28583	28883	29191	29773	30378	30722	30724	30814	31067	31465	31863	32268	32681	32681	32681
DIFFERENCE	0	0	0	0	0	275	592	1.99	2.02	0.97	62	0	0	0	0
PCT. DIFF.	0.00	0.00	0.00	0.00	0.93	0.93	0.97	0.97	0.20	0.00	0.00	0.00	0.00	0.00	0.00
EXPENDITURES															
WITHOUT MX	28625	28925	29234	29542	29850	30158	30474	30797	31113	31511	31910	32316	32729	32729	32729
WITH MX	28625	28925	29234	29735	30349	30777	30670	30797	31113	31511	31910	32316	32729	32729	32729
DIFFERENCE	0	0	0	0	0	699	699	618	196	0	0	0	0	0	0
PCT. DIFF.	0.00	0.00	0.00	0.00	1.33	2.34	2.09	0.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MX INDUCED EXPENDITURE															
NET IMPACT	0	0	0	0	-119	-107	-107	-10	99	62	0	0	0	0	0
HARTLEY															
REVENUES															
WITHOUT MX	1847	1888	1928	1969	2009	2050	2090	2131	2171	2212	2252	2293	2333	2333	2333
WITH MX	1847	1887	2042	3116	46608	9650	11229	11477	9902	9172	9155	9195	9226	9226	9226
DIFFERENCE	0	1	114	1147	4398	7601	9139	9346	7731	6960	6960	6903	6903	6903	6903
PCT. DIFF.	0.00	0.06	5.91	58.27	228.86	370.81	437.21	438.64	356.06	314.70	306.49	301.08	295.89	295.89	295.89
EXPENDITURES															
WITHOUT MX	1847	1888	1928	1969	2009	2050	2090	2131	2171	2212	2252	2293	2333	2333	2333
WITH MX	1847	1889	2159	35982	7288	10601	10389	8837	8782	8822	8863	8903	8903	8903	8903
DIFFERENCE	0	2	230	1614	5279	7729	6511	8298	6646	6570	6570	6570	6570	6570	6570
PCT. DIFF.	0.00	0.12	11.99	81.96	262.74	377.06	407.18	387.59	307.02	297.06	291.72	286.97	281.60	281.60	281.60
MX INDUCED EXPENDITURE															
NET IMPACT	0	-1	-117	-466	-681	-128	-628	-1088	1065	390	333	333	333	333	333
HODKLEY															
REVENUES															
WITHOUT MX	16311	16401	16491	16581	16656	16731	16806	16881	16964	17061	17166	17271	17376	17376	17376
WITH MX	16311	16401	16492	16677	16857	17082	17073	16979	16981	17061	17166	17271	17376	17376	17376
DIFFERENCE	0	0	0	0.01	0.98	2	96	201	351	269	98	17	0	0	0
PCT. DIFF.	0.00	0.00	0.00	0.01	0.98	1.21	2.10	1.60	0.58	0.10	0.00	0.00	0.00	0.00	0.00
EXPENDITURES															
WITHOUT MX	16324	16425	16515	16603	16680	16755	16831	16906	16988	17086	17191	17297	17402	17402	17402
WITH MX	16324	16425	16518	16751	16925	17148	17064	16953	16988	17086	17191	17297	17402	17402	17402
DIFFERENCE	0	0	0	0	0	146	413	245	47	1.38	0.28	0.00	0.00	0.00	0.00
PCT. DIFF.	0.00	0.00	0.00	0.02	0.88	1.47	2.47	1.38	0.28	0.00	0.00	0.00	0.00	0.00	0.00
MX INDUCED EXPENDITURE															
NET IMPACT	0	0	-1	-50	-44	-62	36	51	17	0	0	0	0	0	0
LAMP															
REVENUES															
WITHOUT MX	13040	13060	13060	13060	13068	13073	13073	13073	13073	13073	13073	12985	12985	12985	12985
WITH MX	13040	13060	13060	13060	13068	13073	13112	13112	13073	13073	13073	12985	12985	12985	12985
DIFFERENCE	0	0	0	0	0	0	7	56	119	0.89	0.89	0.89	0	0	0
PCT. DIFF.	0.00	0.00	0.00	0.00	0.00	0.06	0.43	0.43	0.43	0.43	0.43	0.43	0.00	0.00	0.00

Table 4.3.2.6-5. (Page 3 of 6)

LUBBOCK	REVENUES	WITHOUT MX	13080.	13080.	13080.	13057.	13042.	13027.	13012.	12997.	13004.	13004.	13004.		
	WITH MX	13090.	13090.	13090.	13148.	13187.	13117.	13012.	12997.	13004.	13004.	13004.	13004.		
DIFFERENCE	0.	0.	0.	13.	91.	145.	90.	0.	0.	0.	0.	0.	0.		
PCT. DIFF.	0.00	0.00	0.00	0.10	0.70	1.11	0.69	0.00	0.00	0.00	0.00	0.00	0.00		
NET IMPACT	0.	0.	0.	-6.	-35.	-29.	14.	33.	0.	0.	0.	0.	0.		
MORE	REVENUES	WITHOUT MX	177932.	180469.	183046.	185647.	187764.	189905.	192070.	194260.	196473.	198703.	200937.	203235.	
	WITH MX	177932.	180455.	183385.	187083.	190876.	193862.	195319.	197342.	198891.	201018.	203287.	205982.	205938.	
DIFFERENCE	0.	0.	0.	339.	1436.	2912.	3249.	2121.	869.	188.	61.	52.	44.	0.02	
PCT. DIFF.	0.00	0.00	0.00	0.19	0.77	1.59	1.98	1.69	0.44	0.09	0.03	0.03	0.03	0.02	
EXPENDITURES		WITHOUT MX	179528.	178426.	180984.	183556.	185649.	187766.	189907.	192071.	194260.	196465.	198694.	200946.	203223.
	WITH MX	179528.	178436.	181596.	185701.	187304.	191982.	192923.	193746.	196332.	196337.	198752.	200997.	203266.	203266.
DIFFERENCE	0.	0.	0.	611.	2145.	3655.	4116.	4116.	1674.	372.	73.	98.	51.	43.	
PCT. DIFF.	0.00	0.00	0.00	0.34	1.17	1.97	2.19	1.59	0.87	0.19	0.04	0.03	0.03	0.02	
MX INDUCED	0.	0.	-273.	-709.	-743.	-358.	233.	447.	497.	119.	3.	1.	1.	1.	
OLDHAM	REVENUES	WITHOUT MX	10964.	11011.	11036.	11109.	11161.	11221.	11282.	11342.	11402.	11477.	11532.	11627.	11702.
	WITH MX	10964.	11011.	11036.	11162.	11804.	12858.	13590.	13410.	12889.	12893.	12777.	12791.	12865.	12865.
DIFFERENCE	0.	0.	0.	0.	0.	53.	643.	1637.	2276.	2069.	1487.	1206.	1164.	1163.	1163.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.00	0.48	9.76	14.59	20.37	18.24	13.04	10.51	10.08	10.01	9.94
EXPENDITURES		WITHOUT MX	10982.	11027.	11073.	11125.	11178.	11238.	11298.	11358.	11418.	11493.	11569.	11644.	11719.
	WITH MX	10982.	11027.	11073.	11219.	12158.	13297.	13820.	13328.	15702.	15267.	12739.	12814.	12889.	12889.
DIFFERENCE	0.	0.	0.	0.	0.	94.	980.	2059.	2522.	1970.	1284.	1173.	1170.	1170.	1170.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.00	0.85	8.77	18.32	22.32	17.35	11.24	10.21	10.12	10.05	9.98
MX INDUCED	0.	0.	0.	0.	0.	-41.	-337.	-422.	-224.	99.	203.	33.	-6.	-6.	-6.
PARNER	REVENUES	WITHOUT MX	2049.	2064.	2079.	2094.	2124.	2154.	2186.	2214.	2252.	2289.	2334.	2379.	2424.
	WITH MX	2049.	2064.	2080.	2098.	2135.	2186.	2226.	2229.	2290.	2295.	2295.	2334.	2379.	2424.
DIFFERENCE	0.	0.	0.	0.	4.	10.	32.	72.	79.	3.58	1.68	0.26	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.02	0.21	0.49	1.48	3.27	3.58	3.58	1.68	0.26	0.	0.	0.
EXPENDITURES		WITHOUT MX	2052.	2067.	2082.	2097.	2127.	2157.	2187.	2218.	2255.	2293.	2338.	2383.	2428.
	WITH MX	2052.	2067.	2082.	2104.	2141.	2204.	2225.	2272.	2272.	2272.	2272.	2338.	2383.	2428.
DIFFERENCE	0.	0.	0.	1.	7.	14.	47.	97.	78.	17.	0.	0.	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.03	0.32	0.66	2.16	4.44	3.50	0.73	0.00	0.00	0.00	0.00	0.00
MX INDUCED	0.	0.	0.	0.	0.	-2.	-4.	-15.	-25.	2.	21.	6.	0.	0.	0.
NET IMPACT	0.	0.	-42.	-368.	-363.	315.	148.	10.	2.	0.	0.	0.	0.	0.	0.

Table 4.3.2.6-5. (Page 4 of 6)

POTTER/RANDALL						
REVENUES	WITHOUT MX	134548.	136196.	137876.	139589.	141205.
WITH MX	134548.	136246.	138202.	141382.	147197.	153299.
DIFFERENCE	0.	50.	325.	1793.	9953.	10462.
PCT. DIFF.	0.00	0.04	0.24	1.28	4.22	7.32
EXPENDITURES	WITHOUT MX	132032.	134462.	136323.	138017.	141228.
WITH MX	132032.	134752.	136843.	140653.	147578.	153978.
DIFFERENCE	0.	91.	322.	2637.	7964.	12550.
PCT. DIFF.	0.00	0.07	0.38	1.91	5.70	8.40
MIX INDUCED	NET IMPACT	0.	-40.	-137.	-843.	-2011.
GERMAN						
REVENUES	WITHOUT MX	2875.	2890.	2905.	2920.	2935.
WITH MX	2875.	2890.	2905.	2924.	2955.	2974.
DIFFERENCE	0.	0.	0.	4.	20.	30.
PCT. DIFF.	0.00	0.00	0.00	0.13	0.68	4.22
EXPENDITURES	WITHOUT MX	2879.	2894.	2909.	2924.	2939.
WITH MX	2879.	2894.	2909.	2931.	2970.	3193.
DIFFERENCE	0.	0.	0.	0.	7.	31.
PCT. DIFF.	0.00	0.00	0.00	0.23	1.05	6.75
MIX INDUCED	NET IMPACT	0.	0.	0.	-3.	-11.
SWISHER						
REVENUES	WITHOUT MX	7934.	7964.	7994.	8031.	8084.
WITH MX	7934.	7964.	7994.	8041.	8125.	8218.
DIFFERENCE	0.	0.	0.	0.00	0.10	0.41
PCT. DIFF.	0.00	0.00	0.00	0.00	0.12	0.51
EXPENDITURES	WITHOUT MX	7945.	7976.	8006.	8043.	8096.
WITH MX	7945.	7976.	8006.	8040.	8157.	8247.
DIFFERENCE	0.	0.	0.	0.	17.	61.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.21	0.76
MIX INDUCED	NET IMPACT	0.	0.	0.	0.	-7.
CHAVES						
REVENUES	WITHOUT MX	44289.	45002.	45730.	46468.	47122.
WITH MX	44289.	45002.	45733.	46519.	50881.	49085.
DIFFERENCE	0.	0.	13.	2082.	3759.	1292.
PCT. DIFF.	0.00	0.00	0.03	4.48	7.98	2.70
EXPENDITURES	WITHOUT MX	44573.	45289.	46023.	46763.	47424.
WITH MX	44573.	45289.	46038.	46254.	51644.	49124.
DIFFERENCE	0.	0.	0.	15.	2487.	4220.
PCT. DIFF.	0.00	0.00	0.00	0.03	5.32	8.90
MIX INDUCED	NET IMPACT	0.	0.	-2.	-407.	-462.
CURRY						
REVENUES	WITHOUT MX	27660.	27748.	27837.	27923.	27950.
WITH MX	28675.	32474.	36786.	40886.	42419.	42242.
DIFFERENCE	2015.	4725.	9150.	12961.	14481.	15221.
PCT. DIFF.	7.28	17.03	32.87	46.41	51.83	51.13
EXPENDITURES	NET IMPACT	0.	0.	0.	0.	0.

Table 4.3.2-6-5. (Page 5 of 6)

WITHOUT MX	28467	28958	28649	28740	28753	28766	28779	28811	28753	28701	28849	28597
WITH MX	31080	34003	39422	43598	44445	43369	43867	42994	41485	41371	41319	41268
DIFFERENCE	26113	6045	10773	14858	15692	14603	15089	14202	12674	12670	12670	12671
PCT. DIFF.	9.18	21.17	37.60	51.70	54.97	50.77	52.43	49.33	43.99	44.07	44.19	44.31
MIX INDUCED NET IMPACT	-598.	-1319.	-1623.	-1897.	-1210.	-311.	162.	1256.	1534.	1361.	1361.	1361.
DE BACA												
REVENUES												
WITHOUT MX	1992.	1992.	1992.	1992.	1992.	1969.	1974.	1937.	1923.	1916.	1916.	1916.
WITH MX	1992.	2008.	2031.	2034.	2010.	1981.	1966.	1940.	1921.	1916.	1916.	1916.
DIFFERENCE	0.	15.	39.	61.	41.	27.	27.	16.	5.	0.	0.	0.
PCT. DIFF.	0.00	0.76	1.95	3.08	2.09	1.36	1.38	0.85	0.25	0.02	0.00	0.00
EXPENDITURES												
WITHOUT MX	1992.	1992.	1992.	1992.	1969.	1954.	1939.	1923.	1916.	1916.	1916.	1916.
WITH MX	1992.	2015.	2046.	2073.	2013.	1984.	1972.	1940.	1919.	1916.	1916.	1916.
DIFFERENCE	0.	23.	54.	60.	43.	30.	34.	17.	3.	0.	0.	0.
PCT. DIFF.	0.00	1.19	2.70	4.03	2.20	1.54	1.73	0.88	0.16	0.00	0.00	0.00
MIX INDUCED NET IMPACT	0.	-8.	-15.	-19.	-12.	-3.	-7.	-1.	2.	0.	0.	0.
HARDING												
REVENUES												
WITHOUT MX	805.	789.	774.	766.	743.	728.	713.	697.	682.	651.	621.	590.
WITH MX	805.	789.	774.	761.	7081.	3074.	4492.	1954.	816.	652.	621.	590.
DIFFERENCE	0.	0.	0.	0.	314.	2320.	3764.	1241.	118.	4.	0.	0.
PCT. DIFF.	0.00	0.00	0.01	0.01	41.00	313.49	517.11	174.14	16.99	0.53	0.03	0.00
EXPENDITURES												
WITHOUT MX	805.	789.	774.	766.	743.	728.	713.	697.	682.	651.	621.	590.
WITH MX	805.	789.	774.	1144.	3597.	4925.	1703.	730.	682.	651.	621.	590.
DIFFERENCE	0.	0.	0.	377.	2763.	4197.	990.	33.	1.	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.03	49.23	371.74	576.33	138.90	4.74	0.08	0.00	0.00	0.00
MIX INDUCED NET IMPACT	0.	0.	0.	-63.	-433.	-433.	251.	85.	3.	0.	0.	0.
GRAY												
REVENUES												
WITHOUT MX	8606.	8621.	8636.	8652.	8636.	8621.	8606.	8570.	8583.	8544.	8514.	8483.
WITH MX	8606.	10042.	11914.	12168.	9414.	8874.	8756.	8619.	8583.	8544.	8514.	8483.
DIFFERENCE	0.	1441.	3278.	3517.	778.	235.	151.	29.	1.	0.	0.	0.
PCT. DIFF.	0.00	16.71	37.96	40.69	9.01	2.93	1.75	0.33	0.01	0.00	0.00	0.00
EXPENDITURES												
WITHOUT MX	8606.	8621.	8636.	8652.	8636.	8621.	8606.	8590.	8583.	8544.	8514.	8483.
WITH MX	8606.	10334.	12364.	12446.	9136.	8914.	8765.	8596.	8583.	8544.	8514.	8483.
DIFFERENCE	0.	1733.	3728.	3779.	320.	293.	160.	6.	0.	0.	0.	0.
PCT. DIFF.	0.00	20.10	43.17	43.86	6.02	3.40	1.86	0.07	0.00	0.00	0.00	0.00
MIX INDUCED NET IMPACT	0.	-292.	-450.	-278.	258.	-41.	-9.	23.	1.	0.	0.	0.
ROOSEVELT												
REVENUES												
WITHOUT MX	13758.	13808.	13857.	13915.	13973.	14040.	14106.	14172.	14247.	14303.	14371.	14504.
WITH MX	13877.	14152.	14632.	16896.	17528.	17955.	18711.	16194.	15043.	14864.	14879.	15030.
DIFFERENCE	119.	344.	974.	2981.	3555.	3915.	4635.	2022.	796.	559.	528.	527.
PCT. DIFF.	0.87	2.49	7.03	21.42	25.44	27.89	32.86	14.27	5.94	3.91	3.68	3.63
EXPENDITURES												
WITHOUT MX	13846.	13896.	13946.	14004.	14063.	14130.	14196.	14263.	14338.	14396.	14463.	14596.
WITH MX	14018.	14350.	15135.	17459.	17916.	18288.	19117.	16159.	15092.	15015.	15071.	15138.
DIFFERENCE	172.	493.	1168.	3451.	3894.	4158.	4920.	1896.	754.	619.	608.	608.
PCT. DIFF.	1.24	3.26	8.52	24.64	27.40	34.43	34.84	13.30	5.26	4.30	4.20	4.17
MIX INDUCED NET IMPACT	-92.	-109.	-214.	-470.	-299.	-243.	-285.	126.	42.	-60.	-80.	-81.

Table 4.3.2.6-5. (Page 6 of 6)

UNION											
REVENUES											
WITHOUT MX		3717.		3701.		3686.		3678.		3666.	
WITH MX		3717.		3701.		3686.		3701.		3717.	
DIFFERENCE		0.		0.		0.		0.		-1.	
PCT. DIFF.		0.00		0.00		0.00		0.66		2.34	
EXPENDITURES											
WITHOUT MX		3717.		3701.		3686.		3678.		3701.	
WITH MX		3717.		3701.		3686.		3701.		3717.	
DIFFERENCE		0.		0.		0.		0.		-1.	
PCT. DIFF.		0.00		0.00		0.00		0.00		-1.97	
MX INDUCED		0.		0.		0.		0.		0.	
NET IMPACT		0.		0.		0.		-13.		-25.	
REGIONAL TOTAL											
REVENUES											
WITHOUT MX		342353.		348113.		3532970.		359959.		365186.	
WITH MX		3544487.		358471.		369166.		3611037.		370540.	
DIFFERENCE		2134.		6577.		14501.		27207.		45871.	
PCT. DIFF.		0.39		1.20		2.62		5.22		8.12	
EXPENDITURES											
WITHOUT MX		540640.		546385.		552207.		558161.		563357.	
WITH MX		543444.		554732.		38772.		393772.		6148817.	
DIFFERENCE		2784.		8347.		17365.		39511.		53460.	
PCT. DIFF.		0.51		1.93		3.18		6.38		9.49	
MX INDUCED		-650.		-1770.		-3064.		-6404.		-7989.	
NET IMPACT		0.		0.		0.		-13.		-25.	

SOURCE: MDR SCIENCES

(1) ESTIMATES REFLECT AGGREGATE REVENUES AND EXPENDITURES FOR ALL LOCAL GOVERNMENTAL UNITS (COUNTIES, CITIES, SCHOOL DISTRICTS, SPECIAL DISTRICTS) WITHIN THE COUNTY.

30-OCT-80

Table 4.3.2-6-6. (Page 1 of 6)

LOCAL GOVERNMENT REVENUES, EXPENDITURES, AND NET IMPACTS (THOUSANDS FY 1980 \$) (1) BASELINE: LOW
ALTERNATIVE 8B

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BAILEY													
REVENUES													
WITHOUT MX	6232	6248	6283	6305	6313	6328	6343	6358	6373	6380	6380	6380	6380
WITH MX	6232	6268	6283	6326	6443	6599	6593	6775	6381	6380	6380	6380	6380
DIFFERENCE	0.	0.	0.	21.	131.	272.	251.	116.	1.	0.	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.34	2.07	4.30	3.95	1.85	0.41	0.02	0.00	0.00	0.00
EXPENDITURES													
WITHOUT MX	6262	6277	6292	6314	6322	6337	6352	6367	6382	6389	6389	6389	6389
WITH MX	6262	6277	6292	6332	6527	6684	6571.	6434.	6389	6389	6389	6389	6389
DIFFERENCE	0.	0.	0.	38.	206.	347.	219.	67.	3.	0.	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.60	3.25	5.48	3.45	1.05	0.05	0.00	0.00	0.00	0.00
MX INDUCED	0.	0.	0.	-16.	-75.	32.	51.	23.	1.	0.	0.	0.	0.
NET IMPACT	0.	0.	0.										
CASHTO													
REVENUES													
WITHOUT MX	7934	7964	7994	8031	8044	8204	8264	8324	8399	8474	8549	8624	8624
WITH MX	7934	7964	7994	8031	8105	8248	8348	8337	8399	8474	8549	8624	8624
DIFFERENCE	0.	0.	0.	0.	0.	21.	104.	144.	13.	0.	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.26	1.28	1.76	0.92	0.16	0.00	0.00	0.00	0.00
EXPENDITURES													
WITHOUT MX	7945	7976	8006	8043	8096	8156	8276	8336	8412	8487	8552	8637	8637
WITH MX	7945	7976	8006	8043	8133	8317	8367	8313	8336	8412	8487	8552	8552
DIFFERENCE	0.	0.	0.	0.	0.	37.	161.	151.	36.	0.	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.49	1.97	1.84	0.44	0.00	0.00	0.00	0.00	0.00
MX INDUCED	0.	0.	0.	0.	-16.	-56.	-7.	37.	13.	0.	0.	0.	0.
NET IMPACT	0.	0.	0.										
COCHRAN													
REVENUES													
WITHOUT MX	3903	3903	3903	3903	3903	3903	3903	3903	3926	3956	3986	4016	4016
WITH MX	3903	3903	3903	3908	3945	3970	3994	3913	3903	3926	3956	3986	3986
DIFFERENCE	0.	0.	0.	0.	0.	5.	41.	47.	10.	0.	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.14	1.06	1.71	1.09	0.25	0.00	0.00	0.00	0.00
EXPENDITURES													
WITHOUT MX	3909	3909	3909	3909	3909	3909	3909	3909	3909	3909	3909	3909	3909
WITH MX	3909	3909	3909	3918	3976	3983	3936	3926	3931	3951	3961	3972	3972
DIFFERENCE	0.	0.	0.	0.	0.	67.	27.	0.	0.	0.	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.24	1.73	1.91	0.69	0.00	0.00	0.00	0.00	0.00
MX INDUCED	0.	0.	0.	0.	-4.	-26.	-8.	16.	10.	0.	0.	0.	0.
NET IMPACT	0.	0.	0.										
DALLAM													
REVENUES													
WITHOUT MX	4612	4666	4720	4780	4828	4881	4935	4989	5050	5124	5205	5285	5366
WITH MX	4612	4666	4720	4780	4946	5668	6832	6515	5370	5127	5203	5285	5366
DIFFERENCE	0.	0.	0.	0.	0.	118.	786.	1897.	5125	5.	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.00	2.45	16.11	38.43	6.34	0.10	0.00	0.00	0.00
EXPENDITURES													
WITHOUT MX	4811	4867	4923	4986	5035	5092	5148	5267	5345	5429	5513	5597	5597
WITH MX	4811	4867	4923	4986	5201	6128.	7345	6446.	5386	5345	5429	5513	5597
DIFFERENCE	0.	0.	0.	0.	0.	166.	1036.	2197.	1242.	18.	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.00	3.29	20.35	42.68	23.87	0.35	0.00	0.00	0.00
MX INDUCED	0.	0.	0.	0.	0.	-48	-290	-300	284	5.	0.	0.	0.
NET IMPACT	0.	0.	0.										

Table 4.3.2.6-6. (Page 2 of 6)

DEAF SMITH													
REVENUES		WITHOUT MX	14989	15095	15200	15312	15470	15635	15800	15955	16138	16326	16521
WITHOUT MX	WITH MX	0.00	0.00	0.00	10	774	9.92	5.06	4.19	1.69	0.53	0.01	0.00
DIFFERENCE	PCT. DIFF.	0.00	0.00	0.00	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
EXPENDITURES		WITHOUT MX	15281	15388	15495	15610	15771	15939	16107	16276	16452	16643	16842
WITHOUT MX	WITH MX	0.00	0.00	0.00	0.09	1.4	128	16738	16327	16337	16282	16452	16643
DIFFERENCE	PCT. DIFF.	0.00	0.00	0.00	0.09	0.09	0.09	7.23	11.79	2.43	1.42	0.04	0.00
MX INDUCED	NET IMPACT	0.00	0.00	0.00	-5	-354	-324	267	37	79	2	0	0
WALLE													
REVENUES		WITHOUT MX	28583	28883	29191	29499	29806	30114	30429	30732	31067	31465	31863
WITHOUT MX	WITH MX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DIFFERENCE	PCT. DIFF.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EXPENDITURES		WITHOUT MX	28625	28925	29234	29532	29830	30158	30474	30797	31113	31511	31910
WITHOUT MX	WITH MX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DIFFERENCE	PCT. DIFF.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MX INDUCED	NET IMPACT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-37	21	8	0	0
HARTLEY													
REVENUES		WITHOUT MX	1847	1888	1928	1969	2009	2050	2090	2131	2171	2212	2252
WITHOUT MX	WITH MX	0.00	0.00	0.00	0.00	0.06	1.87	9.32	3219	3855	3960	3341	2213
DIFFERENCE	PCT. DIFF.	0.00	0.00	0.00	0.00	0.06	0.06	9.32	1170	1765	959	170	0.06
EXPENDITURES		WITHOUT MX	1847	1888	1928	1969	2009	2050	2090	2131	2171	2212	2252
WITHOUT MX	WITH MX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2280	3592	3780	2948	2174
DIFFERENCE	PCT. DIFF.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1971	1542	1690	437	2
MX INDUCED	NET IMPACT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.49	75.24	60.84	20.52	0.11
HODKLEY													
REVENUES		WITHOUT MX	16311	16401	16491	16581	16656	16731	16806	16881	16964	17061	17166
WITHOUT MX	WITH MX	0.00	0.00	0.00	0.00	0.08	0.45	0.45	16854	1694	16957	17061	17166
DIFFERENCE	PCT. DIFF.	0.00	0.00	0.00	0.00	0.08	0.45	0.45	13	95	37	6	0
EXPENDITURES		WITHOUT MX	16334	16425	16515	16605	16680	16755	16831	16906	16988	17086	17191
WITHOUT MX	WITH MX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16798	16897	16907	16922	16988
DIFFERENCE	PCT. DIFF.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	23	117	141	77	0
MX INDUCED	NET IMPACT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.70	0.84	0.46	0.10
LAMB													
REVENUES		WITHOUT MX	13060	13060	13060	13060	13060	13060	13023	13008	12993	12978	12955
WITHOUT MX	WITH MX	0.00	0.00	0.00	0	0.00	0.00	0.00	13104	13089	13018	12978	12955
DIFFERENCE	PCT. DIFF.	0.00	0.00	0.00	0	0.00	0.00	0.00	23	81	25	0	0
EXPENDITURES													

4-405

PRECEDING PAGE BLANK-NOT FILMED

Table 4.3.2.6-6. (Page 3 of 6)

WITHOUT MX	13080.	13080.	13080.	13080.	13057.	13042.	13027.	13012.	12997.	13004.	13004.	13004.
WITH MX	13080.	13080.	13080.	13080.	13097.	13160.	13045.	13012.	12997.	13004.	13004.	13004.
DIFFERENCE	0.	0.	0.	0.	40.	118.	68.	0.	0.	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.31	0.90	0.52	0.00	0.00	0.00	0.00	0.00
MX INDUCED NET IMPACT	0.	0.	0.	0.	-18.	-36.	14.	25.	0.	0.	0.	0.
LUBBOCK												
REVENUES												
WITHOUT MX	177932.	180469.	183046.	185647.	187764.	185905.	192070.	194260.	196703.	200957.	203235.	205538.
WITH MX	177932.	180469.	183126.	186187.	189369.	192297.	19277.	195691.	197037.	198802.	200968.	203238.
DIFFERENCE	0.	0.	0.	0.	342.	1605.	2392.	2209.	1431.	563.	99.	2.
PCT. DIFF.	0.00	0.00	0.04	0.29	0.85	1.26	1.15	0.74	0.29	0.05	0.01	0.00
EXPENDITURES												
WITHOUT MX	175928.	178436.	180984.	183556.	185649.	187766.	189907.	192071.	194260.	196465.	198894.	200946.
WITH MX	175928.	178436.	181128.	184431.	187420.	190461.	191988.	193183.	194484.	196483.	198700.	203223.
DIFFERENCE	0.	0.	0.	0.	875.	2270.	2695.	2062.	1111.	224.	18.	0.
PCT. DIFF.	0.00	0.00	0.48	0.48	1.22	1.44	1.09	0.58	0.12	0.01	0.00	0.00
MX INDUCED NET IMPACT	0.	0.	-64.	-333.	-666.	-303.	147.	320.	340.	81.	4.	2.
MOORE												
REVENUES												
WITHOUT MX	10966.	11011.	11036.	11109.	11161.	11221.	11282.	11342.	11402.	11477.	11532.	11627.
WITH MX	10966.	11011.	11036.	11109.	11161.	11221.	11458.	11548.	11454.	11477.	11552.	11627.
DIFFERENCE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.57	1.82	0.46	0.00	0.00
EXPENDITURES												
WITHOUT MX	10982.	11027.	11073.	11125.	11178.	11238.	11278.	11358.	11418.	11493.	11569.	11644.
WITH MX	10982.	11027.	11073.	11125.	11178.	11238.	11551.	11558.	11418.	11493.	11569.	11644.
DIFFERENCE	0.	0.	0.	0.	0.	0.	0.	283.	199.	2.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.24	1.76	0.00	0.00	0.00
MX INDUCED NET IMPACT	0.	0.	0.	0.	0.	0.	0.	-77.	7.	53.	0.	0.
OLDHAM												
REVENUES												
WITHOUT MX	2049.	2064.	2079.	2094.	2124.	2154.	2184.	2214.	2232.	2289.	2334.	2379.
WITH MX	2049.	2064.	2079.	2096.	2141.	2188.	2209.	2223.	2253.	2289.	2334.	2379.
DIFFERENCE	0.	0.	0.	0.	2.	17.	33.	25.	9.	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.09	0.80	1.55	1.14	0.38	0.07	0.00	0.00
EXPENDITURES												
WITHOUT MX	2032.	2057.	2082.	2097.	2127.	2157.	2187.	2218.	2255.	2293.	2338.	2383.
WITH MX	2032.	2057.	2082.	2101.	2155.	2198.	2203.	2221.	2255.	2293.	2338.	2383.
DIFFERENCE	0.	0.	0.	0.	0.	3.	28.	17.	4.	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.16	1.30	1.69	0.79	0.17	0.00	0.00	0.00
MX INDUCED NET IMPACT	0.	0.	0.	0.	-1.	-11.	-7.	8.	9.	1.	0.	0.
PARMER												
REVENUES												
WITHOUT MX	7731.	7731.	7731.	7731.	7739.	7754.	7769.	7784.	7806.	7852.	7919.	7979.
WITH MX	7731.	7731.	7731.	7731.	7747.	7776.	7795.	7797.	7809.	7859.	7919.	7979.
DIFFERENCE	0.	0.	0.	0.	8.	22.	26.	14.	3.	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.10	0.10	0.29	0.33	0.18	0.03	0.00	0.00
EXPENDITURES												
WITHOUT MX	7743.	7743.	7743.	7743.	7750.	7765.	7780.	7795.	7818.	7870.	7930.	7991.
WITH MX	7743.	7743.	7743.	7743.	7764.	7795.	7807.	7802.	7818.	7870.	7930.	7991.
DIFFERENCE	0.	0.	0.	0.	0.	14.	30.	27.	7.	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.00	0.18	0.39	0.34	0.09	0.00	0.00	0.00
MX INDUCED NET IMPACT	0.	0.	0.	0.	0.	-6.	-8.	-1.	7.	3.	0.	0.

Table 4.3.2.6-6. (Page 4 of 6)

POTTER/RANDALL																			
REVENUES																			
WITHOUT MX	134548	136196	137876	139589	141203	142837	144501	146198	147927	149688	151081	153307	155165						
WITH MX	134548	136196	137988	140483	143593	145980	147142	147787	148539	149907	151640	153460	155314						
DIFFERENCE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PCT. DIFF.	0.00	0.00	0.08	0.64	1.12	0.894	2.348	1.66	1.92	1.83	1.09	0.41	0.15	0.10	0.10	0	0	0.10	
EXPENDITURES																			
WITHOUT MX	136032	134462	136323	138617	139614	141228	142873	144351	146260	148002	149775	151580	153418						
WITH MX	136032	134462	136523	139284	142712	144144	145421	145713	146576	148172	149940	151739	153572						
DIFFERENCE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.10	
PCT. DIFF.	0.00	0.00	0.15	0.92	0.15	0.201	1.268	0.92	2.22	2.08	1.78	0.80	0.22	0.11	0.11	0.10	0	0.10	
MX INDUCED	0	0	-90	-374	-750	-193	94	427	293	49	-6	-6	-6	-6	-6	-6	-6	-6	
NET IMPACT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SHERMAN																			
REVENUES																			
WITHOUT MX	2875	2890	2905	2920	2935	2950	2965	2980	3002	3025	3055	3085	3115						
WITH MX	2875	2890	2905	2920	2935	2950	2965	2980	3002	3025	3055	3085	3115						
DIFFERENCE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PCT. DIFF.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
EXPENDITURES																			
WITHOUT MX	2879	2894	2909	2924	2939	2954	2969	2984	3007	3029	3059	3087	3120						
WITH MX	2879	2894	2909	2924	2939	2954	2969	2984	3007	3029	3059	3087	3120						
DIFFERENCE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PCT. DIFF.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MX INDUCED	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
NET IMPACT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SWISHER																			
REVENUES																			
WITHOUT MX	7934	7964	7994	8031	8054	8144	8204	8264	8324	8414	8504	8594	8684						
WITH MX	7934	7964	7994	8021	8054	8177	8242	8381	8436	8514	8594	8594	8684						
DIFFERENCE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PCT. DIFF.	0.00	0.00	0.00	0.00	0.00	0.12	0.12	0.41	0.46	0.20	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
EXPENDITURES																			
WITHOUT MX	7945	7976	8006	8043	8096	8156	8216	8276	8336	8427	8517	8607	8697						
WITH MX	7945	7976	8006	8043	8096	8113	8203	8253	8302	8356	8427	8517	8607						
DIFFERENCE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PCT. DIFF.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.38	0.45	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MX INDUCED	0	0	0	0	0	0	0	-8	-14	1	11	2	0	0	0	0	0	0	
NET IMPACT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
CHAVES																			
REVENUES																			
WITHOUT MX	44287	45002	45730	46468	47122	47793	48472	49160	49855	50477	51098	51727	52345						
WITH MX	44287	45002	45730	46468	47122	48220	51817	51443	50108	50477	51098	51727	52345						
DIFFERENCE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PCT. DIFF.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.89	4.69	0.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
EXPENDITURES																			
WITHOUT MX	44573	45289	46023	46765	47424	48099	48782	49474	50174	50800	51425	52058	52700						
WITH MX	44573	45289	46023	46765	47424	48603	52680	51682	50174	50800	51425	52058	52700						
DIFFERENCE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PCT. DIFF.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.05	7.99	4.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MX INDUCED	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
NET IMPACT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
CURRY																			
REVENUES																			
WITHOUT MX	27440	27748	27837	27925	27937	27950	27963	27973	27994	27997	27997	27997	27997						
WITH MX	29997	32230	36678	40057	41686	41732	42990	43137	42009	41792	41691	41691	41691						
DIFFERENCE	1937	4482	8862	12132	13748	15028	15161	14015	13855	13855	13855	13855	13855						
PCT. DIFF.	7.00	16.19	31.84	43.45	49.21	49.31	53.74	54.20	50.06	49.59	49.59	49.59	49.59						
EXPENDITURES																			

Table 4.3.2.6-6. (Page 5 of 6)

WITHOUT MX	28467	28598	28649	28740	28753	2876	28779	28811	28853	28872	28891	28901
WITH MX	34260	38979	42409	43557	42784	43598	42643	41313	41251	41200	41148	41096
DIFFERENCE	2517	5702	10330	13670	14804	14018	13851	12502	12499	12499	12499	12499
PCT. DIFF.	8.84	19.97	36.04	47.56	51.49	48.73	51.49	48.11	43.39	43.59	43.63	43.71
MIX INDUCED	-380	-1220	-1468	-1537	-1056	-236	208	1310	1512	1336	1356	1356
DE BACA												
REVENUES												
WITHOUT MX	1992	1992	1992	1992	1969	1954	1939	1923	1916	1916	1916	1916
WITH MX	1992	1992	1992	1992	1978	1980	1999	1978	1935	1918	1916	1916
DIFFERENCE	0	0	0	0	2	9	26	61	55	19	0	0
PCT. DIFF.	0.00	0.00	0.00	0.00	0.10	0.46	1.39	3.13	2.84	0.98	0.12	0.00
EXPENDITURES												
WITHOUT MX	1992	1992	1992	1992	1969	1954	1939	1923	1916	1916	1916	1916
WITH MX	1992	1992	1992	1992	1982	1991	2022	1987	1929	1916	1916	1916
DIFFERENCE	0	0	0	0	0	0	13	37	83	14	0	0
PCT. DIFF.	0.00	0.00	0.00	0.00	0.14	0.66	1.89	4.27	3.31	0.71	0.01	0.00
MIX INDUCED					-1	-4	-11	-22	-9	5	2	0
NET IMPACT	0	0	0	0	-1	-4	-11	-22	-9	5	2	0
HARDING												
REVENUES												
WITHOUT MX	805	789	774	774	766	743	728	713	697	682	651	621
WITH MX	805	789	774	774	1237	3800	4118	1129	705	683	651	621
DIFFERENCE	0	0	0	0	0	471	3086	3390	417	1	0	0
PCT. DIFF.	0.00	0.00	0.00	0.00	61.49	411.19	465.71	58.45	1.13	0.09	0.00	0.00
EXPENDITURES												
WITHOUT MX	805	789	774	774	766	743	728	713	697	682	651	621
WITH MX	805	789	774	774	1332	4353	4377	787	701	682	651	621
DIFFERENCE	0	0	0	0	0	366	3610	3649	74	0	0	0
PCT. DIFF.	0.00	0.00	0.00	0.00	73.87	485.65	501.23	10.43	0.32	0.00	0.00	0.00
MIX INDUCED					-95	-533	-259	342	4	1	0	0
NET IMPACT	0	0	0	0	-95	-533	-259	342	4	1	0	0
EMAY												
REVENUES												
WITHOUT MX	8606	8621	8636	8636	8632	8636	8621	8606	8590	8583	8544	8514
WITH MX	8606	8621	8636	8636	9304	11582	11704	8971	8593	8583	8544	8514
DIFFERENCE	0	0	0	0	652	2949	3083	366	3	0	0	0
PCT. DIFF.	0.00	0.00	0.00	0.00	7.54	34.11	35.77	4.25	0.03	0.00	0.00	0.00
EXPENDITURES												
WITHOUT MX	8606	8621	8636	8636	8632	8636	8621	8606	8590	8583	8544	8514
WITH MX	8606	8621	8636	8636	9435	12085	11921	8656	8590	8583	8544	8514
DIFFERENCE	0	0	0	0	0	784	3449	3300	50	0	0	0
PCT. DIFF.	0.00	0.00	0.00	0.00	9.06	39.93	38.28	0.58	0.00	0.00	0.00	0.00
MIX INDUCED					0	-131	-503	-217	315	3	0	0
NET IMPACT	0	0	0	0	-131	-503	-217	315	3	0	0	0
INDOBEVELT												
REVENUES												
WITHOUT MX	13758	13808	13857	13915	13973	14040	14106	14172	14247	14305	14371	14437
WITH MX	13870	14112	14122	14178	16076	17970	17522	15389	14926	14849	14890	14935
DIFFERENCE	112	305	365	871	2103	3931	3416	1217	679	544	319	317
PCT. DIFF.	0.81	2.21	4.08	6.26	15.03	28.00	24.21	8.59	4.77	3.80	3.61	3.58
EXPENDITURES												
WITHOUT MX	13846	13896	13946	14004	14063	14130	14196	14263	14338	14396	14463	14530
WITH MX	14007	14295	14461	15081	16523	16411	17717	15395	15049	15004	15060	15021
DIFFERENCE	161	399	715	1077	2460	4281	3521	1132	711	607	597	597
PCT. DIFF.	1.16	2.87	5.13	7.69	17.49	30.30	24.80	7.94	4.96	4.22	4.13	4.09
MIX INDUCED	-49	-94	-150	-206	-357	-351	-106	85	-31	-63	-78	-80
NET IMPACT												

Table 4.3.2.6-6. (Page 6 of 6)

UNION	
REVENUES	
WITHOUT MX	3717.
WITH MX	3701.
DIFFERENCE	0.
PCT. DIFF.	0.00
EXPENDITURES	
WITHOUT MX	3717.
WITH MX	3701.
DIFFERENCE	0.
PCT. DIFF.	0.00
MX INDUCED	0.
NET IMPACT	0.
REGIONAL TOTAL	
REVENUES	
WITHOUT MX	342233.
WITH MX	344403.
DIFFERENCE	2049.
PCT. DIFF.	0.38
EXPENDITURES	
WITHOUT MX	348113.
WITH MX	353700.
DIFFERENCE	4787.
PCT. DIFF.	0.87
MX INDUCED	0.
NET IMPACT	0.

SOURCE: HCR SCIENCES

(1) ESTIMATES REFLECT AGGREGATE REVENUES AND EXPENDITURES FOR ALL LOCAL GOVERNMENTAL UNITS (COUNTIES, CITIES, SCHOOL DISTRICTS, SPECIAL DISTRICTS) WITHIN THE COUNTY.

30-OCT-80

Table 4.3.2.6-7. (Page 1 of 7)

SCHOOL DISTRICT REVENUES, EXPENDITURES, AND NET IMPACTS (THOUSANDS FY 1987 \$) (1) BASELINE: LNW
ALTERNATIVE 7

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BAILEY													
REVENUES													
WITHOUT MX	3767.	3776.	3785.	3798.	3803.	3812.	3821.	3830.	3839.	3841.	3843.	3843.	3843.
WITH MX	3767.	3776.	3785.	3798.	3803.	3812.	3821.	3830.	3839.	3841.	3843.	3843.	3843.
P.L. 874	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
STATE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
LOCAL	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
DIFFERENCE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.12	0.81	13.53	26.78	20.32	5.95	0.58	0.02	0.00	0.00
EXPENDITURES													
WITHOUT MX	3827.	3836.	3845.	3859.	3866.	3873.	3882.	3891.	3901.	3905.	3905.	3905.	3905.
WITH MX	3827.	3836.	3845.	3853.	3857.	3866.	3876.	3885.	3895.	3905.	3905.	3905.	3905.
DIFFERENCE	0.	0.	0.	7.	348.	542.	1083.	541.	2.	0.	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.18	9.02	14.04	27.97	13.93	1.04	0.05	0.00	0.00	0.00	0.00
MX INDUCED	0.	0.	-2.	-89.	-28.	-89.	236.	186.	20.	1.	0.	0.	0.
NET IMPACT													
CASPER													
REVENUES													
WITHOUT MX	4779.	4798.	4816.	4838.	4870.	4906.	4942.	4978.	5015.	5060.	5105.	5150.	5195.
WITH MX	4779.	4798.	4816.	4838.	4932.	5038.	5058.	5088.	5026.	5060.	5105.	5150.	5195.
P.L. 874	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
STATE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
LOCAL	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
DIFFERENCE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.14	1.27	2.68	2.34	1.00	0.22	0.00	0.00	0.00
EXPENDITURES													
WITHOUT MX	4856.	4875.	4893.	4916.	4948.	4985.	5022.	5058.	5095.	5141.	5187.	5233.	5279.
WITH MX	4856.	4875.	4893.	4912.	5042.	5124.	5092.	5000.	5095.	5141.	5187.	5233.	5279.
DIFFERENCE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.25	1.69	2.80	1.41	0.42	0.00	0.00	0.00	0.00
MX INDUCED	0.	0.	0.	0.	-6.	-32.	-8.	45.	29.	11.	0.	0.	0.
NET IMPACT													
COCHRAN													
REVENUES													
WITHOUT MX	2351.	2351.	2351.	2351.	2351.	2351.	2351.	2351.	2351.	2365.	2365.	2365.	2419.
WITH MX	2351.	2351.	2351.	2360.	2379.	2394.	2390.	2367.	2352.	2365.	2365.	2365.	2419.
P.L. 874	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
STATE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
LOCAL	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
DIFFERENCE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PCT. DIFF.	0.03	0.00	0.00	0.00	0.37	1.13	1.82	1.66	0.66	0.00	0.00	0.00	0.00
EXPENDITURES													
WITHOUT MX	2393.	2399.	2409.	2419.	2429.	2439.	2449.	2459.	2469.	2479.	2489.	2499.	2499.
WITH MX	2393.	2399.	2409.	2409.	2429.	2439.	2449.	2459.	2469.	2479.	2489.	2499.	2499.
DIFFERENCE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.59	1.33	1.85	1.11	0.77	0.00	0.00	0.00	0.00
MX INDUCED	0.	0.	0.	0.	-5.	-5.	-5.	-1.	-1.	0.	0.	0.	0.
NET IMPACT													
DALLAS													
REVENUES													
WITHOUT MX	1047.	1114.	1171.	1229.	1279.	1324.	1364.	1391.	1411.	1431.	1451.	1471.	1491.
WITH MX	1047.	1114.	1171.	1229.	1279.	1324.	1364.	1391.	1411.	1431.	1451.	1471.	1491.

4-415

PRECEDING PAGE BLANK-NOT FILLED

Table 4.3.2.6-7. (Page 2 of 7)

Table 4.3.2.6-7. (Page 3 of 7)

PCT. DIFF.	0.00	.10	8.74	65.55	226.79	332.09	369.42	165.42	299.16	790.52	295.30	280.26	275.39
MX INDUCED	0.	-1.	-62.	-282.	+361.	95.	628.	933.	880.	432.	398.	398.	398.
NET IMPACT	0.												
 MONKLEY													
REVENUES													
WITHOUT MX	9826.	9880.	9934.	9989.	10034.	10079.	10124.	10169.	10219.	10278.	10341.	10405.	10468.
WITH 4X	9426.	9800.	9935.	9950.	10169.	10322.	10321.	10242.	10232.	10274.	10341.	10405.	10468.
P.L. A74	U.	0.	0.	13.	19.	44.	19.	0.	0.	0.	0.	0.	0.
STATE	0.	0.	0.	32.	62.	138.	71.	24.	13.	0.	0.	0.	0.
LOCAL	0.	0.	1.	17.	54.	61.	100.	45.	0.	0.	0.	0.	0.
DIFFERENCE	0.	0.	1.	62.	135.	243.	196.	73.	13.	0.	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.01	0.62	1.34	2.41	1.94	0.72	0.13	0.00	0.00	0.00	0.00
EXPENDITURES													
WITHOUT MX	9984.	10039.	10094.	10149.	10195.	10241.	10287.	10333.	10383.	10443.	10507.	10572.	10636.
WITH 4X	9984.	10039.	10096.	10237.	10322.	10499.	10426.	1058.	10383.	10443.	10507.	10572.	10636.
DIFFERENCE	0.	0.	0.	2.	86.	147.	258.	140.	25.	0.	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.02	0.87	1.44	2.52	1.36	0.24	0.00	0.00	0.00	0.00	0.00
MX INDUCED	0.	0.	-1.	-27.	-12.	-15.	57.	48.	13.	0.	0.	0.	0.
NET IMPACT	0.												
 LAWN													
REVENUES													
WITHOUT MX	7868.	7868.	7868.	7868.	7868.	7845.	7836.	7827.	7818.	7823.	7823.	7823.	7823.
WITH MX	7868.	7868.	7868.	7868.	7868.	7915.	7904.	7883.	7818.	7823.	7823.	7823.	7823.
P.L. A74	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
STAFF	0.	0.	0.	0.	0.	4.	25.	40.	25.	0.	0.	0.	0.
LOCAL	0.	0.	0.	0.	0.	4.	28.	45.	27.	0.	0.	0.	0.
DIFFERENCE	0.	0.	0.	0.	0.	4.	32.	70.	68.	25.	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.05	0.41	0.89	0.87	0.32	0.00	0.00	0.00	0.00
EXPENDITURES													
WITHOUT MX	7994.	7994.	7994.	7994.	7994.	7980.	7971.	7962.	7953.	7944.	7948.	7948.	7948.
WITH MX	7994.	7994.	7994.	7994.	7994.	8001.	8028.	8010.	7953.	7944.	7948.	7948.	7948.
DIFFERENCE	0.	0.	0.	0.	0.	7.	48.	76.	48.	0.	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.09	0.60	0.95	0.67	0.00	0.00	0.00	0.00	0.00
MX INDUCED	0.	0.	0.	0.	-3.	-16.	-6.	20.	25.	0.	0.	0.	0.
NET IMPACT	0.												
 TUBROCK													
REVENUES													
WITHOUT MX	99587.	101007.	102449.	103905.	105090.	106288.	107500.	108726.	109965.	111213.	112474.	113749.	115038.
WITH MX	99587.	101007.	102625.	104690.	106754.	108497.	109421.	109994.	110509.	11130.	112510.	113770.	115063.
P.L. A74	0.	0.	0.	6.	44.	67.	0.	0.	0.	0.	0.	0.	0.
STATE	0.	0.	0.	174.	653.	1032.	949.	787.	437.	97.	15.	15.	15.
LOCAL	0.	0.	0.	176.	604.	967.	1110.	973.	482.	107.	21.	17.	17.
DIFFERENCE	0.	0.	0.	176.	784.	1664.	2209.	1972.	1269.	544.	119.	16.	16.
PCT. DIFF.	0.00	0.00	0.17	0.75	1.58	2.08	1.79	1.17	0.49	0.11	0.03	0.03	0.02
EXPENDITURES													
WITHOUT MX	101187.	102629.	104095.	105574.	106778.	107996.	109227.	110472.	111731.	112999.	114241.	115576.	116866.
WITH 4X	101187.	102629.	104395.	106633.	10816.	110082.	112708.	111294.	111913.	114309.	114309.	115601.	116907.
DIFFERENCE	0.	0.	300.	1058.	1418.	2087.	1481.	872.	182.	35.	20.	25.	21.
PCT. DIFF.	0.03	0.00	0.29	1.00	1.72	1.93	1.45	0.74	0.16	0.03	0.02	0.02	0.02
MX INDUCED	0.	0.	-125.	-274.	-174.	122.	417.	447.	362.	82.	R.	5.	4.
NET IMPACT	0.												
 MUDROPE													
REVENUES													
WITHOUT MX	6636.	6633.	6661.	6697.	6724.	6750.	6796.	6837.	6869.	6914.	6959.	7004.	7047.
WITH 4X	6636.	6633.	6661.	6721.	7117.	7832.	8711.	7694.	7744.	7758.	7802.	7847.	7847.
P.L. A74	0.	0.	0.	0.	57.	151.	220.	164.	117.	117.	117.	117.	117.
STAFF	0.	0.	0.	0.	156.	577.	748.	547.	346.	355.	355.	355.	355.

4,419

PRECEDING PAGE BLANK-NOT FILMED

Table 4.3.2.6-7. (Page 4 of 7)

LOCAL		29.		181.		396.		551.		627.		435.		327.		326.	
DIFFERENCE		0.		0.		29.		1072.		1437.		1041.		931.		799.	
PCT. DIFF.		0.00		0.00		0.43		15.86		23.02		21.04		15.15		12.01	
EXPENDITURES		WITHHOLD MX		6740.		6768.		6800.		6832.		6869.		6905.		6946.	
WITH MX		6712.		6740.		6768.		6849.		7388.		8067.		8071.		7705.	
DIFFERENCE		0.		0.		49.		557.		1198.		1486.		1120.		726.	
PCT. DIFF.		0.00		0.00		0.73		8.15		17.44		21.52		16.26		10.41	
MX INDUCED		NET IMPACT		0.		0.		-21.		-163.		-126.		78.		308.	
OLINHAW		REVENUES		1234.		1243.		1253.		1262.		1280.		1298.		1316.	
WITHHOLD MX		1234.		1243.		1253.		1264.		1286.		1316.		1339.		1385.	
P.L. R74		0.		0.		0.		0.		0.		0.		0.		0.	
STATE		0.		0.		0.		0.		2.		4.		13.		27.	
LOCAL		0.		0.		0.		0.		5.		14.		30.		24.	
DIFFERENCE		0.		0.		0.		0.		6.		18.		43.		51.	
PCT. DIFF.		0.00		0.00		0.03		0.16		0.50		1.38		3.25		3.83	
EXPENDITURES		WITHHOLD MX		1254.		1263.		1273.		1282.		1300.		1319.		1337.	
WITH MX		1254.		1263.		1273.		1285.		1307.		1343.		1388.		1396.	
DIFFERENCE		0.		0.		4.		7.		25.		51.		41.		9.	
PCT. DIFF.		0.00		0.00		0.28		0.54		1.88		3.83		3.00		0.64	
MX INDUCED		NET IMPACT		0.		0.		-1.		-1.		-7.		-8.		11.	
PARER		REVENUES		4657.		4657.		4657.		4662.		4671.		4680.		4689.	
WITHHOLD MX		4657.		4657.		4718.		5261.		5499.		5433.		6015.		4705.	
P.L. R74		0.		0.		18.		169.		282.		87.		0.		0.	
STAFF		0.		0.		43.		406.		648.		228.		6.		10.	
LOCAL		0.		0.		0.		0.		28.		47.		149.		2.	
DIFFERENCE		0.		0.		61.		603.		1237.		762.		155.		12.	
PCT. DIFF.		0.00		0.00		1.30		12.05		26.54		16.32		3.32		0.26	
EXPENDITURES		WITHHOLD MX		4732.		4732.		4732.		4737.		4746.		4755.		4764.	
WITH MX		4732.		4815.		4815.		5515.		6046.		5515.		4755.		4768.	
DIFFERENCE		0.		0.		83.		783.		1309.		405.		19.		4.	
PCT. DIFF.		0.00		0.00		1.75		1.54		27.64		8.53		0.41		0.07	
MX INDUCED		NET IMPACT		0.		0.		-27.		-179.		-72.		358.		136.	
POTTER/RANDALL		REVENUES		75305.		76228.		77168.		76127.		79031.		79945.		80876.	
WITHHOLD MX		75305.		76254.		77342.		79186.		82732.		86569.		89231.		87405.	
P.L. R74		0.		0.		0.		131.		617.		978.		812.		80.	
STAFF		0.		0.		23.		451.		1916.		3246.		2502.		1475.	
LOCAL		0.		26.		150.		478.		1167.		2000.		3264.		2596.	
DIFFERENCE		0.		26.		174.		1059.		3701.		6624.		7301.		5580.	
PCT. DIFF.		0.03		0.23		1.36		4.68		8.29		9.13		5.82		3.42	
EXPENDITURES		WITHHOLD MX		76515.		77452.		78404.		79382.		80301.		81175.		81426.	
WITH MX		76515.		77436.		78664.		80896.		81794.		81711.		82711.		83026.	
DIFFERENCE		0.		0.		1.06		n.33		1.74		5.59		9.55		8.17	
PCT. DIFF.		1.01		0.00		0.		-81.		-34.		-787.		-118.		-73.	
MX INDUCED		NET IMPACT		0.		-81.		-21.		-163.		-126.		-78.		-308.	
POTTER/RANDALL		REVENUES		75305.		76228.		77168.		78031.		79945.		80876.		81794.	
WITHHOLD MX		75305.		76254.													

Table 4.3.2.6-7. (Page 5 of 7)

SHERMAN											
REVENUES		WITHOUT MX	1732.	1741.	1750.	1759.	1768.	1777.	1786.	1795.	1809.
		WITH MX	1732.	1741.	1750.	1760.	1780.	1847.	1988.	2367.	1822.
P.L.	874	0.	0.	0.	0.	0.	0.	0.	0.	0.	1840.
STATE	0.	0.	0.	0.	0.	0.	2.	8.	55.	132.	127.
LOCAL	0.	0.	0.	0.	0.	2.	10.	62.	146.	140.	32.
DIFFERENCE	U.	0.	0.	0.	0.	2.	12.	70.	201.	272.	159.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.00	0.12	0.66	3.94	11.28	15.16	8.78
EXPENDITURES		WITHOUT MX	1760.	1769.	1778.	1787.	1796.	1806.	1815.	1824.	1838.
		WITH MX	1760.	1769.	1778.	1791.	1812.	1910.	2064.	2063.	1893.
DIFFERENCE	0.	0.	0.	0.	0.	4.	16.	104.	249.	239.	55.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.00	0.20	0.89	5.77	13.73	13.08	2.98
AN INDUCED		NET IMPACT	0.	0.	0.	0.	-1.	-4.	-34.	34.	104.
SWISHER											
REVENUES		WITHOUT MX	4779.	4798.	4816.	4834.	4852.	4906.	4942.	4978.	5015.
		WITH MX	4779.	4798.	4816.	4833.	4893.	4951.	4988.	5004.	5069.
P.L.	874	0.	0.	0.	0.	0.	0.	0.	0.	5021.	5021.
STATE	0.	0.	0.	0.	0.	0.	5.	17.	25.	18.	7.
LOCAL	0.	0.	0.	0.	0.	5.	19.	28.	20.	7.	0.
DIFFERENCE	U.	0.	0.	0.	0.	0.	2.	45.	45.	25.	7.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.00	0.11	0.49	0.92	0.92	0.51	0.13
EXPENDITURES		WITHOUT MX	4856.	4875.	4893.	4916.	4948.	4985.	5022.	5058.	5095.
		WITH MX	4856.	4875.	4893.	4925.	4980.	5033.	5055.	5071.	5150.
DIFFERENCE	0.	0.	0.	0.	0.	9.	32.	48.	14.	12.	0.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.00	0.18	0.64	0.96	0.67	0.29	0.00
AN INDUCED		NET IMPACT	0.	0.	0.	-4.	-8.	-3.	12.	13.	7.
CHAVES											
REVENUES		WITHOUT MX	27795.	28242.	28699.	29162.	29572.	29993.	30420.	30851.	31288.
		WITH MX	27795.	28242.	28709.	30677.	32217.	30953.	33759.	30966.	31678.
P.L.	874	0.	0.	0.	2.	291.	441.	50.	275.	95.	0.
STATE	0.	0.	0.	0.	0.	6.	1209.	1918.	509.	64.	0.
LOCAL	0.	0.	0.	0.	0.	16.	285.	401.	64.	0.	0.
DIFFERENCE	U.	0.	0.	0.	0.	9.	1515.	2644.	960.	339.	95.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.03	5.20	8.94	3.20	1.11	7.31	0.00
EXPENDITURES		WITHOUT MX	28111.	28564.	29026.	29494.	29909.	30335.	30766.	31203.	31644.
		WITH MX	28111.	28564.	29036.	31098.	32558.	30934.	30884.	31203.	31644.
DIFFERENCE	0.	0.	0.	0.	0.	10.	1633.	7649.	599.	117.	0.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.03	5.44	8.86	1.97	0.39	0.00	0.00
AN INDUCED		NET IMPACT	0.	0.	-1.	-84.	-5.	361.	272.	95.	0.
CURRY											
REVENUES		WITHOUT MX	22804.	22877.	22950.	23021.	23043.	23054.	23080.	23093.	22992.
		WITH MX	22804.	22877.	22950.	30410.	33922.	36387.	36916.	38933.	36501.
P.L.	474	0.	0.	44.	1197.	1404.	2747.	2747.	2691.	4738.	36459.
STATE	1063.	2194.	5243.	7487.	9411.	9779.	10526.	11137.	9422.	RA38.	36377.
LOCAL	125.	633.	1080.	1163.	1159.	1159.	1103.	1056.	6937.	RA38.	RA39.
DIFFERENCE	144.	3541.	7577.	10479.	13454.	13471.	13469.	14121.	13458.	591.	591.
PCT. DIFF.	6.33	14.78	14.77	47.37	57.91	57.91	60.20	54.83	61.40	59.17	58.69

Table 4.3.2.6-7. (Page 6 of 7)

4-425

PRECEDING PAGE BLANK-NOT FILMED

Table 4.3.2.6-7. (Page 7 of 7)

REVENUES		EXPENDITURES		NET IMPACT		REVENUES		EXPENDITURES		NET IMPACT		REGIONAL TOTAL	
WITHOUT MX	8634.	8665.	8607.	6133.	9769.	8411.	8452.	8894.	8941.	8971.	9019.	9067.	9102.
WITH MX	8636.	8801.	9293.	1023.	11341.	11840.	12777.	1014.	9585.	934.	934.	9410.	9452.
P.L. 874	0.	58.	58.	335.	360.	436.	574.	96.	0.	0.	0.	0.	0.
STATE	0.	77.	445.	1720.	1850.	2254.	2700.	58.	476.	336.	275.	271.	271.
LOCAL	22.	59.	94.	134.	367.	339.	350.	556.	168.	81.	79.	79.	79.
DIFFERENCE	22.	136.	597.	2190.	2572.	3029.	3625.	1220.	645.	417.	355.	350.	350.
PCT. DIFF.	0.26	1.57	6.86	25.07	29.33	34.38	40.94	13.52	7.21	4.64	3.93	3.86	3.84
EXPENDITURES	8733.	8764.	8796.	8832.	8869.	8911.	8953.	9043.	9080.	9122.	9164.	9206.	9241.
WITHOUT MX	8822.	9015.	9501.	1098.	11275.	11546.	12388.	10081.	9459.	9421.	9451.	9499.	9541.
WITH MX	95.	251.	706.	2166.	2406.	2635.	3185.	1086.	417.	342.	336.	336.	336.
DIFFERENCE	95.	2.86	8.02	24.52	27.13	29.57	35.57	12.07	4.61	3.76	3.68	3.66	3.65
PCT. DIFF.	1.09	-	-	-	-	-	-	-	-	-	-	-	-
MX INDUCED	-73.	-115.	-109.	24.	166.	395.	440.	144.	228.	75.	19.	14.	14.
NET IMPACT	-	-	-	-	-	-	-	-	-	-	-	-	-
UNION		REVENUES		EXPENDITURES		NET IMPACT		UNION		REVENUES		EXPENDITURES	
WITHOUT MX	2521.	2511.	2500.	2495.	2500.	2511.	2521.	2532.	2547.	2547.	2547.	2547.	2547.
WITH MX	2521.	2511.	2500.	2495.	2500.	2542.	2583.	2592.	2570.	2541.	2541.	2541.	2541.
P.L. 874	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
STATE	0.	0.	0.	0.	0.	0.	18.	46.	54.	0.	0.	0.	0.
LOCAL	0.	0.	0.	0.	0.	0.	5.	13.	16.	7.	0.	0.	0.
DIFFERENCE	0.	0.	0.	0.	0.	0.	5.	31.	62.	23.	0.	0.	0.
PCT. DIFF.	0.09	0.00	0.00	0.00	0.00	0.22	1.24	2.44	2.39	0.90	0.00	0.00	0.00
EXPENDITURES	2550.	2539.	2529.	2524.	2524.	2539.	2559.	2560.	2576.	2576.	2576.	2576.	2576.
WITHOUT MX	2550.	2539.	2529.	2524.	2524.	2551.	2596.	2617.	2589.	2576.	2576.	2576.	2576.
WITH MX	-	-	-	-	-	-	-	-	-	-	-	-	-
DIFFERENCE	0.	0.	0.	0.	0.	0.	22.	57.	67.	28.	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.00	0.88	2.23	2.62	1.11	0.00	0.00	0.00	0.00
MX INDUCED	-	-	-	-	-	-	-	-	-	-	-	-	-
NET IMPACT	0.	0.	0.	0.	0.	-17.	-26.	-5.	23.	0.	0.	0.	0.
REGIONAL TOTAL		REVENUES		EXPENDITURES		NET IMPACT		REGIONAL TOTAL		REVENUES		EXPENDITURES	
WITHOUT MX	322979.	326323.	329123.	333202.	336223.	339314.	342286.	345680.	348959.	352259.	355622.	359037.	362389.
WITH MX	324455.	331058.	341222.	355717.	371587.	383969.	389669.	395395.	37763.	378667.	381999.	384442.	387952.
P.L. 874	256.	675.	1770.	3703.	6163.	7923.	8660.	7949.	6914.	6914.	6914.	6914.	6914.
STATE	1063.	3338.	14988.	22178.	2533.	27191.	22231.	16988.	14311.	13593.	13593.	13517.	13517.
LOCAL	141.	722.	1872.	3R22.	7n23.	10180.	11102.	9534.	4901.	2606.	2532.	2522.	2522.
DIFFERENCE	1456.	4715.	11500.	22515.	35164.	44635.	47112.	39715.	2R04.	7331.	2303.	22667.	22953.
PCT. DIFF.	0.45	1.45	3.49	6.76	11.52	13.15	13.78	11.49	8.25	6.77	6.40	6.33	6.33
EXPENDITURES	322979.	33123H.	334689.	338222.	341289.	34444R.	347642.	350897.	351722.	357572.	360992.	364457.	367952.
WITHOUT MX	327812.	337016.	340863.	362011.	376544.	388823.	39204.	3R1133.	375265.	377106.	380592.	384052.	387550.
WITH MX	329822.	377R.	1944.	1273.	2374.	35254.	41374.	41555.	30241.	21044.	19714.	19593.	197550.
DIFFERENCE	-	-	-	-	-	-	-	-	-	-	-	-	-
PCT. DIFF.	0.60	1.74	3.64	7.03	10.33	12.01	11.67	11.62	5.94	5.92	5.38	5.38	5.38
MX INDUCED	-	-	-	-	-	-	-	-	-	-	-	-	-
NET IMPACT	-514.	-1044.	-674.	-1275.	-110.	3261.	5628.	9474.	776n.	4097.	3437.	3369.	3369.

SUGAR: HIGH SUGAR

SUCH HIGH SCENES AND EXHIBITIONS AS ARE APPROPRIATE TO ALL SCHOLASTIC DISTRICTS WITHIN THE COUNTY.

۳۱۰

4-427

PRECEDING PAGE BLANK-NOT FILMED

School Facilities

deployment area as a whole (Table 4.3.2.6-8). Local districts in the county areas mentioned above will also experience varying levels of impacts, particularly during the peak year construction period.

Capital investment requirements in the deployment region under Alternative 7 and split deployment are presented in Tables 4.3.2.6-9 and 4.3.2.6-10. Information is provided for long-term demands, peak year requirements and annual investment required to satisfy long-term needs. Total investment requirements are differentiated by type of indebtedness required--general obligation bond items, revenue bond items and school bond items.

Long-term capital expenditure requirements under Alternative 7 total \$76.9 million (Table 4.3.2.6-9). About 59 percent of the total requirements are for school expenditures. Similar patterns hold for peak year expenditures. School expenditure requirements represents approximately 46 percent of the \$263.4 million of total capital expenditures. However, use of temporary facilities and/or other mitigative measures such as double sessions could reduce these costs substantially.

The operating base county locations are expected to constitute the majority of long-term capital expenditures. Under Alternative 7 the operating base counties of Curry and Hartley represent approximately 73.0 percent of total capital outlays in the long-term. In the peak year, however, the counties where DDA facilities are proposed represent the majority of the \$263.4 of total capital expenditures (66.7 percent). These peak year demands, however, could be met by temporary facilities with a concurrent reduction in the peak year capital requirements.

Total long-term capital expenditures in the region under the split deployment are \$38.4 million (Table 4.3.2.6-10), approximately 50 percent of total outlays under Alternative 7. Peak year expenditures are expected to be \$145.1 million for split deployment, approximately 55.1 percent of total peak year expenditures under Alternative 7.

The level of capital expenditure necessary to support growth due to M-X will be significant for all counties in the Texas/New Mexico deployment region. However, local jurisdictions do not have the ability to finance these levels of infrastructure demand. Due to the low tax base and/or property tax limitations for the counties in the region, local jurisdictions are unable to finance the bonds necessary to support either long-term or peak year capital expenditure requirements. In addition, county areas having little or no long-term effects will not have an incentive to build to the peak year requirements. Temporary degradations of service levels could result if mitigative strategies and/or outside aid are not available.

Operating Base Impacts

Beryl

Iron County School District, which currently maintains an enrollment capacity of approximately 4,100 is expected to experience enrollment demands in excess of capacity under projected normal growth conditions prior to 1982. This indicates what any additional enrollment demands attributable to M-X would result in stresses to the local education systems above the level which would occur under normal

growth conditions. Under M-X deployment Alternatives 1, 3, and 4, an operating base near Beryl would be located within the jurisdiction of this school district. Population in-migration associated with base construction would occur by 1982 under Alternatives 3 and 4, and somewhat later (1984) under Alternative 1. The result of this population in-migration would be a number of school-aged dependents requiring educational services.

Table 4.3.2.6-11 presents the number of school-aged children expected by grade group for each M-X alternative between the years 1982 and 1994 on an annual basis. As indicated, in 1982, Alternatives 3 and 4 may each add up to 680 additional pupils to the school district, an increase of approximately 14.0 percent over the 4,790 enrollments expected under baseline growth conditions. Alternative 1, however, would add enrollments constituting only a 3.4 percent increase over the baseline enrollments of 5,100 at the initial year of M-X - related population in-migration, in 1984. By 1989, the year of peak enrollment growth attributable to M-X, the percentage increase over baseline growth for Alternatives 1, 3 and 4 may range between approximately 80.0 (Alternative 1) and 84.0 percent (Alternatives 3 and 4) over the 5,815 enrollments expected under normal growth conditions.

Subsequent to peak year enrollment demands resulting from M-X, enrollment levels can be expected to stabilize, the level of which may be useful for long-range educational planning purposes. Table 4.3.2.6-11 indicates that the Iron County School District may have to provide long-term educational services for between 10,100 (Alternative 1) and 11,240 pupils (Alternatives 3 and 4) should an M-X operating base be located near Beryl. Approximately 6,400 of this total would be attributable to normal enrollment growth in the county. Should no operating base be located in Iron County, the school district would still receive additional demands for services as a result of spillover effects of technical facility construction in adjacent counties. The short and long-term effects of these enrollment demands under Alternatives 2, 5, 6, 8 under Nevada/Utah, and the Proposed Action would be considerably less than under Alternatives 1, 3, and 4. Regardless of which M-X deployment alternative is selected, it is evident that given the posture of existing facility inadequacy to meet even the projected number of baseline enrollments expected for the areas that M-X related enrollments will certainly accentuate the need for additional facilities and personnel.

Table 4.3.2.6-12 indicates the number of teachers which may be required to accommodate baseline and M-X-related enrollment demand on a grade group basis for all years between 1982 and 1994. As was the case with enrollments, Alternatives 1, 3, and 4 will require the largest number of teachers. Alternative 1 may initially require seven additional teachers to accommodate M-X-related enrollment increases in 1984, will necessitate nearly 200 by 1989, and require approximately 120 to accommodate long-term demands. Alternatives 3 and 4 may require an additional 30 teachers to accommodate initial M-X-related enrollment increases in 1982. However, by 1989 it is estimated that a little more than 200 teachers may be required to service M-X-related demands, a staffing level that is anticipated to remain fairly constant over the long-term. This brings the total long-term teacher requirement to approximately 490 when combining M-X-related teachers required with those which would be required to accommodate baseline enrollment levels. It is likely that the school district may experience difficulty in attracting and retaining an adequate staffing level.

Table 4-3-2-6-8. (Page 1 of 7)

4114	1111.	1170.	3210.	3129.	3960.	4685.	4484.	3645.	3146.	3495.	3550.	1674.
4114	0.	0.	0.	26.	159.	326.	175.	0.	0.	0.	0.	0.
4114	0.	0.	0.	61.	383.	793.	447.	12.	5.	0.	0.	0.
4114	0.	0.	0.	0.	40.	251.	251.	282.	2.	0.	0.	0.
4114	0.	0.	0.	0.	582.	1370.	1133.	294.	5.	0.	0.	0.
4114	0.	0.	0.	0.	2.67	17.75	61.35	33.83	8.67	0.14	0.04	0.04
DIFFTOT MX	3.03	1.00	0.00	0.00	2.67	17.75	61.35	33.83	8.67	0.14	0.04	0.04
PCT. DIFF.												
EXPENDITURES												
4114 MX	1147.	3184.	3221.	3262.	3294.	3331.	3358.	3404.	3446.	3495.	3551.	3607.
4114 M	3147.	3184.	3221.	3262.	3294.	3331.	3358.	3404.	3446.	3495.	3551.	3607.
DIFFERENCE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MX INDUCED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NFT IMPACT	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
DAF SAITH												
REVENUES												
4114 MX	9030.	9033.	9151.	9224.	9319.	9419.	9518.	9618.	9722.	9724.	9835.	9952.
P.L. 874	0.	0.	1.	9702.	10345.	9922.	9631.	9682.	9724.	9835.	9952.	10070.
STATF	0.	0.	3.	140.	234.	0.	0.	0.	0.	0.	0.	0.
LJCAT	0.	0.	0.	335.	570.	16.	106.	2.	2.	0.	0.	0.
DIFFTOT	0.	0.	0.	5.	478.	1026.	688.	69.	2.	0.	0.	0.
PCT. DIFF.	0.03	0.00	0.05	5.18	11.01	5.34	1.84	0.67	0.02	0.02	0.00	0.00
EXPENDITURES												
4114 MX	9175.	9239.	9304.	9373.	9469.	9570.	9671.	9772.	9878.	9993.	10112.	10232.
4114 M	9175.	9239.	9311.	9321.	9469.	9570.	9770.	9790.	9878.	9993.	10112.	10232.
DIFFERENCE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PCT. DIFF.	0.03	0.00	0.08	0.7	6.48	10.85.	200.	118.	4.	0.	0.	0.
MX INDUCED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NFT IMPACT	0.	0.	-2.	-171.	-59.	303.	57.	61.	2.	0.	0.	0.
HALF												
REVENUES												
4114 MX	17210.	17400.	17585.	17771.	17956.	18141.	18331.	18526.	18716.	18955.	19195.	19439.
P.L. 974	0.	0.	0.	17771.	17956.	18167.	18362.	18532.	18716.	18955.	19195.	19439.
STATF	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
LJCAT	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
DIFFTOT YCAT	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PCT. DIFF.	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.04	0.00	0.00	0.00
EXPENDITURES												
4114 MX	17435.	17619.	17868.	18056.	18244.	18433.	19626.	18823.	19016.	19260.	19503.	19751.
4114 M	17495.	17679.	17868.	18056.	18244.	18477.	19638.	18833.	19016.	19260.	19503.	19751.
DIFFERENCE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PCT. DIFF.	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.07	0.00	0.00	0.00
MX INDUCED	0.	0.	0.	0.	0.	0.	0.	-18.	7.	0.	0.	0.
NFT IMPACT	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MARTLET												
REVENUES												
4114 MX	1650.	1697.	1723.	1753.	1795.	1931.	1867.	1904.	1940.	1975.	2012.	2048.
P.L. 974	0.	0.	0.	1723.	1760.	1946.	2755.	3212.	2596.	2057.	1977.	2048.
STATF	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
LJCAT	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
DIFFTOT YCAT	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PCT. DIFF.	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.01	0.00	0.00	0.00
EXPENDITURES												
4114 MX	1677.	1714.	1750.	1787.	1824.	1874.	1961.	1997.	2011.	2045.	2085.	2045.
4114 M	1677.	1714.	1750.	1787.	1824.	1874.	1961.	1997.	2011.	2045.	2085.	2045.
DIFFERENCES	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PCT. DIFF.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TRIPES												
4114 MX	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
4114 M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

Table 4.3.2.6-8. (Page 3 of 7)

PCT. DIFF.	0.00	0.00	0.00	0.10	11.24	62.39	67.05	16.90	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MX INDUCED	0.	0.	0.	-1.	-54.	-237.	73.	365.	115.	1.	0.	0.	0.	0.	0.	0.
NET IMPACT	0.	0.	0.	-1.	-54.	-237.	73.	365.	115.	1.	0.	0.	0.	0.	0.	0.
 HOCKLEY																
REVENUES																
WITHOUT MX	9826.	9880.	9934.	9989.	10034.	10089.	10134.	10187.	10234.	10287.	10341.	10405.	10468.			
WITH MX	9826.	9880.	9934.	9989.	10034.	10089.	10134.	10187.	10234.	10287.	10341.	10405.	10468.			
P.L. 874	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
STATE	0.	0.	0.	0.	0.	0.	0.	1.	33.	39.	22.	5.	0.	0.	0.	0.
LOCAL	0.	0.	0.	0.	0.	0.	0.	7.	36.	24.	5.	0.	0.	0.	0.	0.
DIFFERENCE	0.	0.	0.	0.	0.	0.	0.	7.	43.	63.	26.	5.	0.	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.07	0.42	0.76	0.62	0.62	0.26	0.05	0.00	0.00	0.00	0.00	0.00
EXPENDITURES																
WITHOUT MX	9984.	10039.	10094.	10149.	10195.	10241.	10287.	10333.	10383.	10433.	10483.	10537.	10572.	10636.		
WITH MX	9984.	10039.	10094.	10161.	10157.	10327.	10327.	10327.	10327.	10327.	10327.	10327.	10327.	10327.	10327.	10327.
DIFFERENCE	0.	0.	0.	0.	12.	62.	74.	41.	9.	0.	0.	0.	0.	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.12	0.61	0.72	0.40	0.40	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MX INDUCED	0.	0.	0.	-6.	-19.	2.	22.	18.	5.	0.	0.	0.	0.	0.	0.	0.
NET IMPACT	0.	0.	0.	-6.	-19.	2.	22.	18.	5.	0.	0.	0.	0.	0.	0.	0.
 LAM&G																
REVENUES																
WITHOUT MX	7868.	7868.	7868.	7868.	7868.	7867.	7854.	7836.	7827.	7818.	7803.	7823.	7823.	7823.	7823.	7823.
WITH MX	7868.	7868.	7868.	7868.	7868.	7867.	7867.	7867.	7867.	7867.	7867.	7867.	7867.	7867.	7867.	7867.
P.L. 874	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
STATE	0.	0.	0.	0.	0.	0.	0.	0.	11.	33.	19.	0.	0.	0.	0.	0.
LOCAL	0.	0.	0.	0.	0.	0.	0.	12.	36.	21.	0.	0.	0.	0.	0.	0.
DIFFERENCE	0.	0.	0.	0.	0.	0.	0.	12.	47.	54.	19.	0.	0.	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.60	0.69	0.24	0.00	0.00	0.00	0.00	0.00
EXPENDITURES																
WITHOUT MX	7994.	7994.	7994.	7994.	7994.	7980.	7971.	7962.	7953.	7944.	7944.	7948.	7948.	7948.	7948.	7948.
WITH MX	7994.	7994.	7994.	7994.	7994.	8002.	8031.	8031.	8031.	8031.	8031.	8031.	8031.	8031.	8031.	8031.
DIFFERENCE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.00	0.27	0.78	0.46	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MX INDUCED	0.	0.	0.	0.	0.	-9.	-14.	19.	19.	0.	0.	0.	0.	0.	0.	0.
NET IMPACT	0.	0.	0.	-9.	-14.	19.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
 LUBROCK																
REVENUES																
WITHOUT MX	9957.	101007.	102449.	103905.	105690.	106288.	107500.	108726.	109655.	111213.	112474.	113749.	115038.			
WITH MX	9957.	101007.	102491.	104195.	105971.	107656.	108796.	109583.	110319.	111276.	112481.	113751.	115038.			
P.L. 874	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
STATE	0.	0.	0.	0.	0.	0.	0.	3R.	593.	703.	538.	290.	58.	5.	2.	0.
LOCAL	0.	0.	0.	0.	4J.	252.	653.	775.	593.	319.	64.	55.	5.	2.	0.	0.
DIFFERENCE	0.	0.	0.	0.	41.	289.	841.	1368.	1249.	854.	355.	63.	6.	2.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.04	0.27	0.84	1.29	1.29	1.29	0.79	0.32	0.06	0.01	0.00	0.00	0.00
EXPENDITURES																
WITHOUT MX	101187.	102629.	104095.	105574.	106778.	107996.	109227.	110472.	111731.	112999.	114291.	115576.	116896.			
WITH MX	101187.	102629.	104166.	106004.	107893.	109319.	110233.	111012.	111840.	113008.	114281.	115576.	116896.			
DIFFERENCE	0.	0.	0.	0.	71.	429.	1115.	1327.	1012.	546.	110.	9.	4.	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.07	0.07	0.41	1.04	1.04	1.04	0.93	0.49	0.10	0.01	0.00	0.00	0.00	0.00
MX INDUCED	0.	0.	-79.	-140.	-734.	44.	284.	312.	245.	55.	3.	2.	0.	0.	0.	0.
NET IMPACT	0.	0.	-79.	-140.	-734.	44.	284.	312.	245.	55.	3.	2.	0.	0.	0.	0.
 MORE																
REVENUES																
WITHOUT MX	6631.	6631.	6631.	6631.	6631.	6631.	6631.	6631.	6631.	6631.	6631.	6631.	6631.	6631.	6631.	6631.
WITH MX	6631.	6631.	6631.	6631.	6631.	6631.	6631.	6631.	6631.	6631.	6631.	6631.	6631.	6631.	6631.	6631.
P.L. 874	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
STATE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

Table 4.3.2.6-8. (Page 4 of 7)

Table 4.3.2.6-8. (Page 5 of 7)

SHERMAN		SAISNER		CHAVES		CURRY	
REVENUES		REVENUES		REVENUES		REVENUES	
WITHOUT MX	1732.	1741.	1750.	1759.	1766.	1777.	1795.
WITH MX	1732.	1741.	1750.	1759.	1768.	1777.	1795.
P.L. 874	0.	0.	0.	0.	0.	0.	0.
STATE	0.	0.	0.	0.	0.	0.	0.
LOCAL	0.	0.	0.	0.	0.	0.	0.
DIFFERENCE	0.	0.	0.	0.	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EXPENDITURES							
WITHOUT MX	1760.	1769.	1778.	1787.	1795.	1806.	1815.
WITH MX	1760.	1769.	1778.	1777.	1796.	1806.	1815.
DIFFERENCE	0.	0.	0.	0.	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MX INDUCED							
NET IMPACT	0.	0.	0.	0.	0.	0.	0.
REVENUES							
WITHOUT MX	4779.	4798.	4816.	4836.	4870.	4906.	4942.
WITH MX	4779.	4798.	4816.	4836.	4876.	4925.	4967.
P.L. 874	0.	0.	0.	0.	0.	0.	0.
STATE	0.	0.	0.	0.	0.	5.	13.
LOCAL	0.	0.	0.	0.	0.	6.	15.
DIFFERENCE	0.	0.	0.	0.	0.	6.	19.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.12	0.39	0.49
EXPENDITURES							
WITHOUT MX	4856.	4875.	4893.	4916.	4948.	4985.	5022.
WITH MX	4856.	4875.	4893.	4916.	4957.	5010.	5041.
DIFFERENCE	0.	0.	0.	0.	0.	9.	25.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.18	0.50	0.59
MX INDUCED							
NET IMPACT	0.	0.	0.	0.	-3.	-5.	5.
REVENUES							
WITHOUT MX	27795.	28242.	28699.	29162.	29572.	29993.	30420.
WITH MX	27795.	28242.	28699.	29162.	29572.	30316.	32634.
P.L. 874	0.	0.	0.	0.	0.	63.	477.
STATE	0.	0.	0.	0.	0.	260.	192.
LOCAL	0.	0.	0.	0.	0.	0.	46.
DIFFERENCE	0.	0.	0.	0.	0.	0.	323.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.00	1.08	8.27
EXPENDITURES							
WITHOUT MX	28111.	28564.	29026.	29494.	29909.	30335.	30766.
WITH MX	28111.	28564.	29026.	29494.	29909.	30667.	32288.
DIFFERENCE	0.	0.	0.	0.	0.	332.	1397.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.00	1.09	6.23
MX INDUCED							
NET IMPACT	0.	0.	0.	0.	0.	-9.	-17.
REVENUES							
WITHOUT MX	22804.	22877.	22950.	23023.	23133.	23043.	23166.
WITH MX	24182.	26122.	30364.	33432.	35621.	37728.	38649.
P.L. 874	743.	432.	1222.	1795.	2264.	3261.	3996.
STATE	1010.	2271.	5215.	7167.	8740.	13249.	10415.
LOCAL	124.	595.	977.	1447.	1579.	1341.	1020.
DIFFERENCE	1377.	3266.	7414.	10410.	12588.	13277.	14714.
PCT. DIFF.	6.04	14.77	12.91	95.21	54.65	67.47	60.39

REVENUES
WITHOUT MX
WITH MX
P.L. 874
STATE
LOCAL
DIFFERENCE
PCT. DIFF.
MX INDUCED
NET IMPACT

REVENUES
WITHOUT MX
WITH MX
P.L. 874
STATE
LOCAL
DIFFERENCE
PCT. DIFF.
MX INDUCED
NET IMPACT

REVENUES
WITHOUT MX
WITH MX
P.L. 874
STATE
LOCAL
DIFFERENCE
PCT. DIFF.
MX INDUCED
NET IMPACT

REVENUES
WITHOUT MX
WITH MX
P.L. 874
STATE
LOCAL
DIFFERENCE
PCT. DIFF.
MX INDUCED
NET IMPACT

Table 4.3.2.6-8. (Page 6 of 7)

EXPENDITURES											
WITHOUT MX	23064.	23138.	23211.	23285.	23296.	23317.	23327.	23343.	23296.	23254.	23169.
WITH MX	24878.	30774.	33387.	34416.	34152.	35142.	34966.	34113.	34081.	34041.	33999.
P.L. 874	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
STATE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
LOCAL	0.	0.	0.	0.	0.	2.	5.	12.	9.	0.	0.
DIFFERENCE	0.	0.	0.	0.	0.	0.	3.	12.	30.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.02	0.26	0.90	2.25	5.83	2.54	0.07
EXPENDITURES											
WITHOUT MX	1367.	1367.	1367.	1367.	1351.	1341.	1330.	1320.	1314.	1314.	1314.
WITH MX	1367.	1367.	1367.	1369.	1359.	1363.	1381.	1388.	1322.	1314.	1314.
P.L. 874	0.	0.	0.	0.	0.	2.	8.	22.	51.	6.	0.
STATE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
LOCAL	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
DIFFERENCE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.00	0.15	0.60	1.66	3.80	2.91	0.62	0.07
MX INDUCED											
NET IMPACT	0.	0.	0.	0.	-2.	-5.	-10.	-21.	12.	25.	7.
MANDING											
REVENUES											
WITHOUT MX	546.	535.	525.	520.	504.	494.	483.	473.	463.	442.	400.
WITH MX	546.	535.	525.	508.	3035.	3367.	895.	492.	454.	421.	379.
P.L. 874	0.	0.	0.	75.	478.	478.	0.	0.	0.	0.	0.
STATE	0.	0.	0.	0.	313.	1998.	2046.	57.	18.	0.	0.
LOCAL	0.	0.	0.	0.	0.	55.	349.	354.	1.	0.	0.
DIFFERENCE	0.	0.	0.	0.	389.	2531.	412.	19.	2.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.00	74.76	501.99	581.79	65.13	3.91	0.35	0.09
EXPENDITURES											
WITHOUT MX	552.	542.	531.	526.	510.	499.	489.	478.	468.	447.	426.
WITH MX	552.	542.	531.	926.	3068.	3037.	511.	480.	468.	447.	426.
P.L. 874	0.	0.	0.	0.	400.	2538.	2538.	22.	2.	0.	0.
STATE	0.	0.	0.	0.	76.15	497.60	508.08	4.55	0.42	0.00	0.00
LOCAL	0.	0.	0.	0.	-12.	-6.	335.	389.	16.	2.	0.
DIFFERENCE	0.	0.	0.	0.							
MX INDUCED	0.	0.	0.	0.							
NET IMPACT	0.	0.	0.	0.							
DUAY											
REVENUES											
WITHOUT MX	5838.	5848.	5858.	5869.	5858.	5848.	5838.	5827.	5822.	5796.	5754.
WITH MX	5838.	5848.	5858.	6407.	8463.	6207.	5827.	5822.	5796.	5754.	5734.
P.L. 874	0.	0.	0.	104.	457.	432.	0.	0.	0.	0.	0.
STATE	0.	0.	0.	434.	1912.	1850.	51.	10.	0.	0.	0.
LOCAL	0.	0.	0.	0.	76.	334.	318.	0.	0.	0.	0.
DIFFERENCE	0.	0.	0.	0.	2446.	2615.	369.	10.	0.	0.	0.
PCT. DIFF.	0.00	0.00	0.00	0.00	q.18	41.74	6.33	0.17	0.00	0.00	0.00
EXPENDITURES											
WITHOUT MX	5934.	5915.	5925.	5936.	5925.	5915.	5904.	5898.	5894.	5862.	5841.
WITH MX	5934.	5915.	5925.	6490.	6349.	516.	516.	5862.	5841.	5820.	5809.
P.L. 874	0.	0.	0.	0.	554.	2424.	2291.	12.	0.	0.	0.
STATE	0.	0.	0.	0.	46.92	38.73	0.21	7.00	0.00	0.00	0.00
LOCAL	0.	0.	0.	0.	0.33	0.33	0.33	0.33	0.00	0.00	0.00
DIFFERENCE	0.	0.	0.	0.							
PCT. DIFF.	0.00	0.00	0.00	0.00							
MX INDUCED	0.	0.	0.	0.	-16.	21.	374.	357.	10.	0.	0.
NET IMPACT	0.	0.	0.	0.							

4-441

PRECEDING PAGE BLANK-NOT FILMED

Table 4.3.2.6-8. (Page 7 of 7)

SOURCES: WOODWARD

(1) ESTIMATES OF THE AGGREGATE AFFECTIONS AND EXPENDITURES BY AGE, SCHOLARSHIPS WITHIN THE COUNTRY.

MEED

4-443

PRECEDING PAGE BLANK-NOT FILMED

Table 4.3.2.6-9. (Page 1 of 4)

ALTERNATIVE 7A FULL DEBT SERVICE - TEXAS/NEW MEXICO (L)
 BASE I AT CLOVIS, NM (CURRY CO.)
 BASE II AT DALHART, TX (HARTLEY CO.)

M-X RELATED CAPITAL INVESTMENTS, REQUIREMENTS

(THOUSANDS FY 1993 \$)

SERVICE	LONG TERM (1994)	ANNUAL INVESTMENT REQUIRED(1) (2) PEAK YEAR		
		GENERAL OBLIGATION BOND ITEMS (3)	REVENUE BOND ITEMS (4)	SCHOOLS
BAILEY		0.0	0.0	0.0
		REVENUE BOND ITEMS (4)	0.0	0.0
		SCHOOLS	0.0	0.0
		TOTAL	0.0	0.0
CASTRO		0.0	0.0	0.0
		GENERAL OBLIGATION BOND ITEMS (3)	0.0	0.0
		REVENUE BOND ITEMS (4)	0.0	0.0
		SCHOOLS	0.0	0.0
		TOTAL	0.0	0.0
Cochran		0.0	0.0	0.0
		GENERAL OBLIGATION BOND ITEMS (3)	0.0	0.0
		REVENUE BOND ITEMS (4)	0.0	0.0
		SCHOOLS	0.0	0.0
		TOTAL	0.0	0.0
DALLAM		1842.3	1842.3	1842.3
		GENERAL OBLIGATION BOND ITEMS (3)	1842.3	1842.3
		REVENUE BOND ITEMS (4)	1402.3	704.2
		SCHOOLS	1701.3	102.3
		TOTAL	4946.6	4255.7
DEAF SMITH		0.0	0.0	0.0
		GENERAL OBLIGATION BOND ITEMS (3)	0.0	0.0
		REVENUE BOND ITEMS (4)	0.0	0.0
		SCHOOLS	0.0	0.0
		TOTAL	0.0	0.0
HALE		3316.9	1903.4	1093.3
		GENERAL OBLIGATION BOND ITEMS (3)	3316.9	1903.4
		REVENUE BOND ITEMS (4)	0.0	0.0
		SCHOOLS	0.0	0.0
		TOTAL	3316.9	1903.4
HARTLEY		724.2	412.6	2279.9
		GENERAL OBLIGATION BOND ITEMS (3)	724.2	412.6
		REVENUE BOND ITEMS (4)	0.0	0.0
		SCHOOLS	0.0	0.0
		TOTAL	724.2	412.6

Table 4.3.2.6-9. (Page 2 of 4)

HICKLEY	GENERAL OBLIGATION BOND ITEMS (3) REVENUE BOND ITEMS (4) SCHOOLS TOTAL	3175.9 237.2 1455.4 20166.4	1058.6 7947.1 791.1 369.4 5466.7	7947.1 4947.7 1767.0 30536.8
LAMAR	GENERAL OBLIGATION BOND ITEMS (3) REVENUE BOND ITEMS (4) SCHOOLS TOTAL	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	191.8 285.3 643.9 1420.9
LARIMER	GENERAL OBLIGATION BOND ITEMS (3) REVENUE BOND ITEMS (4) SCHOOLS TOTAL	76.2 75.1 52.9 204.2	76.2 75.1 52.9 204.2	244.7 147.0 520.8 581.3
MORROW	GENERAL OBLIGATION BOND ITEMS (3) REVENUE BOND ITEMS (4) SCHOOLS TOTAL	1780.3 1351.8 1662.6 4861.7	894.7 676.9 811.3 2462.9	6208.4 3945.1 2176.8 3708.8 9340.7
OLDHAM	GENERAL OBLIGATION BOND ITEMS (3) REVENUE BOND ITEMS (4) SCHOOLS TOTAL	0.0 0.0 0.0 4861.7	0.0 0.0 0.0 0.0	163.5 98.2 127.9 389.6
PARKER	GENERAL OBLIGATION BOND ITEMS (3) REVENUE BOND ITEMS (4) SCHOOLS TOTAL	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	2070.3 1179.5 3267.8 6517.6
POTTER/RANDALL	GENERAL OBLIGATION BOND ITEMS (3) REVENUE BOND ITEMS (4) SCHOOLS TOTAL	3205.3 2447.0 2712.1 9364.4	1672.5 815.7 1356.1 1774.1	15443.0 9441.4 17326.9 47611.3
SHERMAN	GENERAL OBLIGATION BOND ITEMS (3) REVENUE BOND ITEMS (4) SCHOOLS TOTAL	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	402.9 142.1 521.8 1065.7

4-447

PRECEDING PAGE BLANK-NOT FILMED

Table 4.3.2.6-9. (Page 3 of 4)

SCHOOL DISTRICT	GENERAL OBLIGATION BOND ITEMS (3)	REVENUE BOND ITEMS (4)	SCHOOLS	TOTAL	
CHAVES	0.0	0.0	0.0	0.0	154.4
GENERAL OBLIGATION BOND ITEMS (3)	0.0	0.0	0.0	0.0	9.7
REVENUE BOND ITEMS (4)	0.0	0.0	0.0	0.0	119.1
SCHOOLS	0.0	0.0	0.0	0.0	366.2
TOTAL	0.0	0.0	0.0	0.0	
CURRI	0.0	0.0	0.0	0.0	4101.5
GENERAL OBLIGATION BOND ITEMS (3)	0.0	0.0	0.0	0.0	2365.1
REVENUE BOND ITEMS (4)	0.0	0.0	0.0	0.0	5777.1
SCHOOLS	0.0	0.0	0.0	0.0	12246.7
TOTAL	0.0	0.0	0.0	0.0	
DE RACA	6904.7	6144.5	6144.5	6144.5	16920.6
GENERAL OBLIGATION BOND ITEMS (3)	5196.2	2598.1	2598.1	2598.1	12139.8
REVENUE BOND ITEMS (4)	23911.0	5977.0	5977.0	5977.0	26118.0
SCHOOLS	36011.9	14720.4	14720.4	14720.4	57176.4
FIRAL					
HARDING	0.0	0.0	0.0	0.0	130.4
GENERAL OBLIGATION BOND ITEMS (3)	0.0	0.0	0.0	0.0	83.1
REVENUE BOND ITEMS (4)	0.0	0.0	0.0	0.0	105.8
SCHOOLS	0.0	0.0	0.0	0.0	327.3
TOTAL	0.0	0.0	0.0	0.0	
QUAY	0.0	0.0	0.0	0.0	4061.5
GENERAL OBLIGATION BOND ITEMS (3)	0.0	0.0	0.0	0.0	2313.9
REVENUE BOND ITEMS (4)	0.0	0.0	0.0	0.0	640.7
SCHOOLS	0.0	0.0	0.0	0.0	12793.2
TOTAL	0.0	0.0	0.0	0.0	
RUSSELL	0.0	0.0	0.0	0.0	3629.6
GENERAL OBLIGATION BOND ITEMS (3)	987.4	459.7	459.7	459.7	4602.3
REVENUE BOND ITEMS (4)	756.3	252.1	252.1	252.1	2677.0
SCHOOLS	732.1	366.0	366.0	366.0	6945.8
TOTAL	2415.7	1077.9	1077.9	1077.9	14225.1
UNION	0.0	0.0	0.0	0.0	
GENERAL OBLIGATION BOND ITEMS (3)	0.0	0.0	0.0	0.0	189.8
REVENUE BOND ITEMS (4)	0.0	0.0	0.0	0.0	114.0
SCHOOLS	0.0	0.0	0.0	0.0	145.5
FIRAL	0.0	0.0	0.0	0.0	443.1
TEXAS	0.0	0.0	0.0	0.0	
GENERAL OBLIGATION BOND ITEMS (3)	10000.9	5474.4	5474.4	5474.4	12759.3
REVENUE BOND ITEMS (4)	7651.3	1050.9	1050.9	1050.9	17607.4

Table 4.3.2.6-9. (Page 4 of 4)

SCHOOLS	20687.3	7581.7	69370.1
TOTAL	38427.6	16116.1	15474.8
NEW MEXICO			
GENERAL OBLIGATION BOND ITEMS (3)	7892.1	6604.3	35645.6
REVENUE BOND ITEMS (4)	5952.5	2850.2	21700.2
SCH. HILLS	24643.1	6333.8	51222.2
TOTAL	38487.7	15758.3	108628.1
REGIONS TOTAL			
GENERAL OBLIGATION BOND ITEMS (3)	17981.0	12078.7	88405.0
REVENUE BOND ITEMS (4)	13603.8	5910.1	54361.6
SCHOOLS	45330.4	1395.7	120600.3
TOTAL	76915.3	31914.4	263312.9

 (1) INVESTMENT REQUIREMENTS PRESENT THE AVERAGE ANNUAL LEVEL OF EXPENDITURES NEEDED TO PROVIDE THE LONG-TERM SERVICE REQUIREMENTS BY THE FIRST YEAR IN WHICH THIS LEVEL OF INVESTMENT SHOULD BE DEMANDED.
 (2) MAXIMUM ANNUAL INVESTMENT REQUIRED.
 (3) GENERAL OBLIGATION BOND ITEMS INCLUDE POLICE, FIRE, GOVERNMENT, HEALTHY SERVICE, LIBRARY, AND STREET EXPENDITURES.
 (4) REVENUE BOND ITEMS INCLUDE WATER AND WASTEWATER FACILITY EXPENDITURES.

Source: HDR Sciences, 30-JCT-80

Table 4.3.2.6-10. (Page 1 of 4)

ALTERNATIVE BB: SPLIT DEPLOYMENT (80/20)-TEXAS/NFM MEXICO
BASED AT CLOVIS, NM (CURRY CO.)

NFM RELATED CAPITAL INVESTMENTS REQUIREMENTS

(THOUSANDS FY 1983 \$)

SERVICE	LONG TERM (1994)	ANNUAL INVESTMENT REQUIRED(1)/(2) PEAK YEAR
BAILEY		
GENERAL OBLIGATION BOND ITEMS (3)	0.0	0.0
REVENUE BOND ITEMS (4)	0.0	0.0
SCHOOLS	0.0	0.0
TOTAL	0.0	0.0
CASTRO		
GENERAL OBLIGATION BOND ITEMS (3)	0.0	0.0
REVENUE BOND ITEMS (4)	0.0	0.0
SCHOOLS	0.0	0.0
TOTAL	0.0	0.0
CUCHRAN		
GENERAL OBLIGATION BOND ITEMS (3)	0.0	0.0
REVENUE BOND ITEMS (4)	0.0	0.0
SCHOOLS	0.0	0.0
TOTAL	0.0	0.0
DALLAS		
GENERAL OBLIGATION BOND ITEMS (3)	0.0	0.0
REVENUE BOND ITEMS (4)	0.0	0.0
SCHOOLS	0.0	0.0
TOTAL	0.0	0.0
DEAF SMITH		
GENERAL OBLIGATION BOND ITEMS (3)	0.0	0.0
REVENUE BOND ITEMS (4)	0.0	0.0
SCHOOLS	0.0	0.0
TOTAL	0.0	0.0
HALF		
GENERAL OBLIGATION BOND ITEMS (3)	0.0	0.0
REVENUE BOND ITEMS (4)	0.0	0.0
SCHOOLS	0.0	0.0
TOTAL	0.0	0.0

4-453

PRECEDING PAGE BLANK-NOT FILMED

Table 4.3.2.6-10. (Page 2 of 4)

MARSHALL	GENERAL OBLIGATION BOND ITEMS (3) REVENUE BOND ITEMS (4) SCHOOLS TOTAL	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	2012.5 1145.5 3175.2 6334.2
HOCKLEY	GENERAL OBLIGATION BOND ITEMS (3) REVENUE BOND ITEMS (4) SCHOOLS TOTAL	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	239.0 143.5 185.2 567.8
LARA	GENERAL OBLIGATION BOND ITEMS (3) REVENUE BOND ITEMS (4) SCHOOLS TOTAL	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	199.0 119.5 154.4 472.8
LUBBOCK	GENERAL OBLIGATION BOND ITEMS (3) REVENUE BOND ITEMS (4) SCHOOLS TOTAL	2.0 5.0 0.0 7.5	2.0 5.0 0.0 7.5	4261.2 2588.6 3303.1 10123.0
MORE	GENERAL OBLIGATION BOND ITEMS (3) REVENUE BOND ITEMS (4) SCHOOLS TOTAL	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	262.3 149.4 414.5 826.3
ODDGRAM	GENERAL OBLIGATION BOND ITEMS (3) REVENUE BOND ITEMS (4) SCHOOLS TOTAL	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	69.8 41.9 57.9 164.6
PARKER	GENERAL OBLIGATION BOND ITEMS (3) REVENUE BOND ITEMS (4) SCHOOLS TOTAL	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	50.3 30.2 39.7 120.2
POTTER/RANDALL	GENERAL OBLIGATION BOND ITEMS (3) REVENUE BOND ITEMS (4) SCHOOLS TOTAL	247.9 155.9 169.6 563.5	247.9 155.9 169.6 563.5	4141.0 2591.7 4357.1 11289.3
SHERMAN	GENERAL OBLIGATION BOND ITEMS (3) REVENUE BOND ITEMS (4) SCHOOLS TOTAL	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	1.0 0.0 0.0 0.0

Table 4.3.2.6-10. (Page 3 of 4)

SALISBURY			
GENERAL OBLIGATION BOND ITEMS (3)	0.0	0.0	80.1
REVENUE BOND ITEMS (4)	0.0	0.0	48.1
SCHOOLS	0.0	0.0	61.7
TOTAL	0.0	0.0	187.8
CHAVES			
GENERAL OBLIGATION BOND ITEMS (3)	0.0	0.0	3500.4
REVENUE BOND ITEMS (4)	0.0	0.0	1094.2
SCHOOLS	0.0	0.0	5521.3
TOTAL	0.0	0.0	11015.8
CIRRY			
GENERAL OBLIGATION BOND ITEMS (3)	6711.0	5971.3	17140.4
REVENUE BOND ITEMS (4)	5048.6	1682.3	11065.5
SCHOOLS	21620.0	5905.2	25807.3
TOTAL	35379.6	13559.1	54013.7
DE RACA			
GENERAL OBLIGATION BOND ITEMS (3)	0.0	0.0	140.7
REVENUE BOND ITEMS (4)	0.0	0.0	84.5
SCHOOLS	0.0	0.0	110.3
TOTAL	0.0	0.0	135.4
HARDING			
GENERAL OBLIGATION BOND ITEMS (3)	0.0	0.0	3507.1
REVENUE BOND ITEMS (4)	0.0	0.0	169.0
SCHOOLS	0.0	0.0	554.5
TOTAL	0.0	0.0	11039.7
QUAY			
GENERAL OBLIGATION BOND ITEMS (3)	0.0	0.0	3352.9
REVENUE BOND ITEMS (4)	0.0	0.0	190.0
SCHOOLS	0.0	0.0	527.6
TOTAL	0.0	0.0	10547.5
RUSSETTE			
GENERAL OBLIGATION BOND ITEMS (3)	269.7	451.5	4025.4
REVENUE BOND ITEMS (4)	743.5	185.7	2322.7
SCHOOLS	718.8	357.1	6054.9
TOTAL	7432.0	996.7	12417.0
UVALDE			
GENERAL OBLIGATION BOND ITEMS (3)	0.0	0.0	7.0
REVENUE BOND ITEMS (4)	0.0	0.0	2.0
SCHOOLS	0.0	0.0	5.0
TOTAL	0.0	0.0	14.0
TRAVIS			
GENERAL OBLIGATION BOND ITEMS (3)	249.9	249.9	16751.7
REVENUE BOND ITEMS (4)	161.4	161.4	1648.7
SCHOOLS			
TOTAL			

Table 4.3.2.6-10. (Page 4 of 4)

SCHOOLS	189.6	189.5
TOTAL:	600.0	600.3
NEW MEXICO		
GENERAL OBLIGATION BOND ITEMS (3)	7640.0	6422.7
REVENUE BOND ITEMS (4)	5792.1	1866.7
SCHOOLS	24330.0	626.4
TOTAL:	37811.6	14551.9
REGIONAL TOTAL		
GENERAL OBLIGATION BOND ITEMS (3)	7930.7	6672.6
REVENUE BOND ITEMS (4)	5953.5	2030.1
SCHOOLS	24522.4	6450.3
TOTAL	38412.6	15156.9

 (1) INVESTMENT REQUIREMENTS PRESENT THE AVERAGE ANNUAL LEVEL OF EXPENDITURES NEEDED TO PROVIDE THE LONG-TERM SERVICE REQUIREMENTS BY THE FIRST YEAR IN WHICH THIS LEVEL OF INVESTMENT SHOULD BE DEMANDED.
 (2) MAXIMUM UNUSUAL INVESTMENT REQUIRED.
 (3) GENERAL OBLIGATION BOND ITEMS INCLUDE POLICE, FIRE, GOVERNMENT, HEALTH SERVICE, LIBRARY, AND STREET EXPENDITURES.
 (4) REVENUE BOND ITEMS INCLUDE WATER AND WASTEWATER FACILITY EXPENDITURES.

Source: HOK Sciences, 30-Dec-80

AD-A104 359 AIR FORCE SYSTEMS COMMAND WASHINGTON DC
DRAFT ENVIRONMENTAL IMPACT STATEMENT, MX DEPLOYMENT AREA SELECT--ETC(II)
DEC 80
UNCLASSIFIED AFSC-TR-81-59

F/G 5/3

NL

3 OF 3

AD-A104 359

END
DATE
FILED
10-81
DTIC

Table 4.3.2.6-11.

PROJECTED BASELINE AND M-X INDUCED SCHOOL ENROLLMENTS BY GRADE LEVEL, BY ALTERNATIVE, IN IRUN
ASSUMING TREND BASELINE

ALTERNATIVE / NUMBER PUPILS BY GRADE LEVEL	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BASELINE ENROLLMENTS	4786	4938	5108	5290	5423	5549	5681	5815	5952	6061	6174	6282	6384
PROPOSED ACTION													
K-6	0	0	0	25	169	244	263	259	220	210	209	208	208
7-9	0	0	0	13	85	122	132	130	110	105	104	104	104
10-12	0	0	0	13	85	122	132	130	110	105	104	104	104
TOTAL M-X RELATED	0	0	0	50	339	489	526	519	439	419	417	416	415
M-X PLUS BASELINE	4786	4938	5108	5240	5762	6038	6207	6394	6391	6480	6591	6698	6799
PERCENT DIFFERENCE FROM BASELINE	0.0	0.0	0.0	0.9	6.3	8.8	9.3	8.9	7.4	6.9	6.8	6.6	6.5
ALTERNATIVE 1													
K-6	0	0	87	330	1172	1888	2174	2325	2007	1846	1846	1846	1846
7-9	0	0	43	165	586	944	1087	1162	1004	923	923	923	923
10-12	0	0	43	165	586	944	1087	1162	1004	923	923	923	923
TOTAL M-X RELATED	0	0	173	660	2344	3776	4348	4649	4014	3693	3692	3692	3691
M-X PLUS BASELINE	4786	4938	5281	5930	7767	9325	10029	10464	9966	9754	9846	9974	10075
PERCENT DIFFERENCE FROM BASELINE	0.0	0.0	3.4	12.5	43.2	68.0	76.5	79.9	67.4	60.7	59.8	59.8	57.9
ALTERNATIVE 3													
K-6	340	753	1454	2072	2298	2256	2425	2437	2431	2431	2430	2430	2430
7-9	170	377	727	1036	1149	1128	1213	1219	1216	1215	1215	1215	1215
10-12	170	377	727	1036	1149	1128	1213	1219	1216	1215	1215	1215	1215
TOTAL M-X RELATED	680	1506	2907	4144	4597	4913	4851	4875	4863	4862	4862	4862	4860
M-X PLUS BASELINE	5466	6444	8015	9434	10020	10042	10532	10690	10815	10923	11036	11143	11244
PERCENT DIFFERENCE FROM BASELINE	14.2	30.5	56.9	78.3	84.9	81.3	85.4	83.8	81.7	80.2	78.7	77.4	76.1
ALTERNATIVE 4													
K-6	340	753	1454	2072	2298	2236	2423	2437	2431	2431	2430	2430	2430
7-9	170	377	727	1036	1149	1128	1213	1219	1216	1215	1215	1215	1215
10-12	170	377	727	1036	1149	1128	1213	1219	1216	1215	1215	1215	1215
TOTAL M-X RELATED	680	1506	2907	4144	4597	4913	4851	4875	4863	4862	4862	4861	4860
M-X PLUS BASELINE	5466	6444	8015	9434	10020	10042	10532	10690	10815	10923	11036	11143	11244
PERCENT DIFFERENCE FROM BASELINE	14.2	30.5	56.9	78.3	84.9	81.3	85.4	83.8	81.7	80.2	78.7	77.4	76.1
ALTERNATIVE 5													
K-6	16	47	161	269	334	315	347	369	304	285	284	283	282
7-9	8	33	81	134	167	159	173	184	152	143	142	141	141
10-12	8	33	81	134	167	158	173	184	152	143	142	141	141
TOTAL M-X RELATED	33	133	323	537	661	630	694	738	608	571	567	566	565
M-X PLUS BASELINE	4819	5071	5431	5827	6091	6179	6375	6553	6560	6632	6741	6848	6949
PERCENT DIFFERENCE FROM BASELINE	0.7	2.7	6.3	10.2	12.3	11.4	12.2	12.7	10.2	9.4	9.2	9.0	8.8
ALTERNATIVE 6													
K-6	16	67	161	268	334	315	347	369	304	285	284	283	282
7-9	8	33	81	134	167	158	173	184	152	143	142	141	141
10-12	8	33	81	134	167	158	173	184	152	143	142	141	141
TOTAL M-X RELATED	33	133	323	537	661	630	694	738	608	571	567	566	565
M-X PLUS BASELINE	4819	5071	5431	5827	6091	6179	6375	6553	6560	6632	6741	6848	6949
PERCENT DIFFERENCE FROM BASELINE	0.7	2.7	6.3	10.2	12.3	11.4	12.2	12.7	10.2	9.4	9.2	9.0	8.8

SOURCE: HDR SCIENCES, 1-NOV-80

Table 4.3.2.6-12.

PROJECTED BASELINE AND M-X INDUCED TEACHER REQUIREMENTS BY GRADE LEVEL, BY ALTERNATIVE, IN IRON
ASSUMING TREND BASELINE

ALTERNATIVE / NUMBER TEACHERS BY GRADE LEVEL	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BASELINE REQUIREMENTS	217	224	232	240	246	252	258	264	270	275	280	285	290
PROPOSED ACTION													
K-6	0	0	0	1	4	10	11	10	9	8	8	8	8
7-9	0	0	0	1	5	6	6	5	5	5	5	5	5
10-12	0	0	0	1	4	6	6	5	5	5	5	5	5
TOTAL M-X RELATED	0	0	0	2	14	21	22	22	19	18	18	18	18
M-X PLUS BASELINE	217	224	232	242	260	273	280	286	293	298	303	308	308
PERCENT DIFFERENCE FROM BASELINE	0.0	0.0	0.0	0.0	5.7	8.3	9.5	8.3	7.0	6.5	6.4	6.3	6.2
ALTERNATIVE 1													
K-6	0	0	3	13	47	76	87	93	80	74	74	74	74
7-9	0	0	2	7	25	41	47	51	44	40	40	40	40
10-12	0	0	2	8	27	43	49	53	46	42	42	42	42
TOTAL M-X RELATED	0	0	7	28	99	159	184	196	170	156	156	156	156
M-X PLUS BASELINE	217	224	239	268	345	411	442	460	440	431	436	441	446
PERCENT DIFFERENCE FROM BASELINE	0.0	0.0	3.0	11.6	40.2	63.0	71.3	74.1	62.8	56.6	55.6	54.6	53.8
ALTERNATIVE 3													
K-6	14	30	58	83	92	90	97	97	97	97	97	97	97
7-9	7	16	32	45	50	49	53	53	53	53	53	53	53
10-12	8	17	33	47	52	51	55	55	55	55	55	55	55
TOTAL M-X RELATED	29	64	123	175	194	191	205	206	205	205	205	205	205
M-X PLUS BASELINE	246	288	335	415	440	443	463	470	475	480	485	490	495
PERCENT DIFFERENCE FROM BASELINE	12.3	28.5	53.0	72.8	78.7	75.7	79.4	77.9	75.8	74.4	73.0	71.8	70.6
ALTERNATIVE 4													
K-6	14	30	58	83	92	90	97	97	97	97	97	97	97
7-9	7	16	32	45	50	49	53	53	53	53	53	53	53
10-12	6	17	33	47	52	51	55	55	55	55	55	55	55
TOTAL M-X RELATED	29	64	123	175	194	191	205	206	205	205	205	205	205
M-X PLUS BASELINE	246	288	335	415	440	443	463	470	475	480	485	490	495
PERCENT DIFFERENCE FROM BASELINE	13.3	28.5	53.0	72.8	78.7	75.7	79.4	77.9	75.8	74.4	73.0	71.8	70.6
ALTERNATIVE 5													
K-6	1	3	6	11	13	13	14	15	12	11	11	11	11
7-9	0	1	4	6	7	7	8	8	7	6	6	6	6
10-12	0	2	4	6	8	7	8	8	7	6	6	6	6
TOTAL M-X RELATED	1	6	14	23	28	27	31	31	29	24	24	24	24
M-X PLUS BASELINE	219	230	246	263	274	279	287	295	296	299	304	307	314
PERCENT DIFFERENCE FROM BASELINE	0.5	2.7	6.0	9.6	11.4	10.7	11.2	11.7	9.6	8.7	8.4	8.3	8.3
ALTERNATIVE 6													
K-6	1	3	6	11	13	13	14	15	12	11	11	11	11
7-9	0	1	4	6	7	7	8	8	7	6	6	6	6
10-12	0	2	4	6	8	7	8	8	7	6	6	6	6
TOTAL M-X RELATED	1	6	14	23	28	27	31	31	29	24	24	24	24
M-X PLUS BASELINE	218	230	246	263	274	279	287	295	296	299	304	307	314
PERCENT DIFFERENCE FROM BASELINE	0.5	2.7	6.0	9.6	11.4	10.7	11.2	11.7	9.6	8.7	8.4	8.3	8.3

SOURCE: HHR SCIENCES, 1-MDV-80

The proportion of total enrollments and teachers required attributable to other projects in the area when compared to those attributable to M-X plus baseline growth is extremely low. For example, under Alternatives 3 and 4, in which a large operating base may be located near Beryl, of the total number of enrollments which the school district might expect during peak year 1989, less than 0.5 percent are other project related.

Coyote Spring

M-X deployment Alternatives 1, 2, 4, 6 and the Proposed Action all identify a potential operating base location in the vicinity of Coyote Spring north of Las Vegas. Construction of such a facility would generate population in-migration which would be distributed between Lincoln and Clark Counties in Nevada, and to a much lesser extent, elsewhere. Associated with this population in-migration would be a number of school-aged dependents requiring education services. The accommodation of M-X-related demands for educational services would be shared primarily between the Clark and Lincoln County School Districts. Since M-X-related population in-migration is anticipated to occur at substantially higher levels into Clark County, the following discussion will concentrate primarily upon the effects to the Clark County School District.

Table 4.3.2.6-13 and 4.3.2.6-14 present the number of school-aged children expected to enter the Clark and Lincoln County School Districts respectively, by grade group for each M-X alternative between the years 1982 and 1994 on an annual basis. As indicated, initial enrollment additions to the Clark County School District would occur in 1984 under Alternatives 1, 2, 8 under Nevada/Utah, and the Proposed Action, and in 1986 under Alternative 4. In all cases except Alternative 4, the number of enrollments expected (1,220-1,230) would account for less than 1.0 percent of the projected 136,012 resident school-aged children who will already be receiving educational services at that time. Alternative 4, with initial enrollments of approximately 2,600 would contribute approximately 2.0 percent over the 145,586 enrollments expected under normal growth conditions. In Lincoln County, initial enrollments attributable to M-X may occur as early as 1982 due to regional labor force dynamics as described in Effects on Employment and Labor Force. Between 25 and 30 additional enrollments could be expected to require educational services in Lincoln County under Alternatives 1, 2, 3, 4, 8 under Nevada/Utah, and the Proposed Action during this year, an increase of 2.5 to 3.0 percent over the 978 school-aged children which are anticipated to already reside in the county.

Peak levels of enrollments generated by M-X into Clark County vary in time with deployment alternatives. For Alternatives 1, 2, 4, 6, 8 under Nevada/Utah, and the Proposed Action, peak levels of enrollments attributable to the project would occur in 1987, 1986, 1988, 1989 and 1987 respectively. Depending on which of these alternatives is ultimately selected, M-X-attributable enrollments may increase the number of enrollments in Clark County by up to between 3.0 and 4.0 percent over normal projected growth conditions which indicate that between 1986 and 1989, the number of baseline enrollments will increase from nearly 145,600 to 157,900. In Lincoln County, peak level enrollment increases under Alternatives 1, 2, 4, 6 and the Proposed Action may all occur in 1986. Alternative 8 under Nevada/Utah, however, is expected to peak somewhat later, 1988. Under all of these alternatives except Alternative 8 under Nevada/Utah, the peak level of M-X-related enrollment would result in increases ranging between 105.0 and 115.0 percent over the 1,070 projected

baseline enrollments, thus requiring the Lincoln County School District to be able to accommodate a rough doubling in enrollment demand at peak year. Alternative 8 under Nevada/Utah, would result in an increase of approximately 75.0 percent over baseline in 1988 which is estimated to be just over 1,100. While the enrollment increases during peak years in Clark County are not expected to result in serious deterioration in the capability of local facilities to accommodate the demands, it is evident that peak year demands in Lincoln County will exceed the ability for the existing facilities to adequately handle such a large scale demand increase.

Subsequent to peak year enrollment demands resulting from M-X, enrollment levels can be expected to stabilize, the level of which may be useful for long-range educational planning purposes. Table 4.3.2.6-13 indicates that under Alternatives 1, 2, 4, 6, 8 under Nevada/Utah, and the Proposed Action, that the Clark County School District would require adequate facilities to accommodate between 182,250 and 183,370 pupils of which between approximately 2.0 and 3.0 percent would be attributable to M-X. No long-term enrollment increases are anticipated under M-X deployment Alternatives 3 and 5 in Clark County. Long-term enrollment increases to the Lincoln County School District are expected to range between 3.0 and 9.0 percent over projected baseline growth regardless of which deployment alternative is selected. It is likely that Lincoln County School District would be able to much more efficiently accommodate the long-term demands of baseline and M-X-related enrollments than the short-term peak years, demands at which time the need for additional educational facilities and personnel would be substantial.

The number of teachers required to accommodate M-X-related enrollment demands in Clark County for Alternatives 1, 2, 8 under Nevada/Utah, and the Proposed Action in the long-term approximate 200, an increase of only 2.5 percent over the 8,115 already expected to be there, while for Alternatives 4 and 6, approximately three-quarters of this number would be required. As is the case with enrollments, no additional teachers would be required after 1986 under Alternatives 3 and 4. In Lincoln County, 2 to 4 teachers would be required to accommodate long-term M-X-induced enrollment increases regardless of alternative selected. In neither Clark nor Lincoln counties should the requirement for additional teachers to accommodate long-term demands present a problem.

In Clark County, the proportion of total enrollments and teachers required attributable to other projects in the area when compared to those attributable to M-X plus baseline is relatively small. For example, for Alternatives 1, 2, 8 under Nevada/Utah, and the Proposed Action (under which a large operating base may be located near Coyote Spring) the total number of additional enrollments which the Clark County School District might expect as a result of M-X and other projects between 4.0 and 6.0 percent of the total cumulative effects are attributable to other projects. Almost no additional enrollments attributable to other projects are expected in Lincoln County between 1982 and 1994.

Delta

Millard County School District, which currently maintains an enrollment capacity of approximately 2,360, is expected to experience enrollment demands in excess of capacity under projected normal growth conditions prior to 1982. This indicates that any additional enrollment demand attributable to M-X would result in stresses to the local educational system above the level which would occur under

Table 4.3.2.6-13.

PROJECTED BASELINE AND M-X INDUCED SCHOOL ENROLLMENTS BY GRADE LEVEL, BY ALTERNATIVE, IN CLARK
ASSUMING TREND BASELINE

ALTERNATIVE / NUMBER PUPILS BY GRADE LEVEL	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BASELINE ENROLLMENTS	126212	130886	136012	141402	145586	149572	153775	157933	162186	166319	170543	174593	178541
PROPOSED ACTION													
K-6	0	0	612	1862	2917	2938	2889	2413	2413	2413	2413	2413	2413
7-9	0	0	306	931	1458	1469	1445	1207	1207	1207	1207	1207	1207
10-12	0	0	206	921	1459	1469	1445	1207	1207	1207	1207	1207	1207
TOTAL M-X RELATED	0	0	1224	3724	5876	5778	4826	4826	4826	4826	4826	4826	4826
M-X PLUS BASELINE	126212	130886	137236	145126	151419	155448	159533	162259	167012	171145	175369	179419	183367
PERCENT DIFFERENCE FROM BASELINE	0.0	0.0	0.9	2.6	4.0	3.9	3.8	3.1	3.0	2.9	2.8	2.8	2.7
ALTERNATIVE 1													
K-6	0	0	612	1862	2918	2941	2894	2413	2413	2413	2413	2413	2413
7-9	0	0	306	931	1459	1470	1447	1207	1207	1207	1207	1207	1207
10-12	0	0	206	931	1459	1470	1447	1207	1207	1207	1207	1207	1207
TOTAL M-X RELATED	0	0	1224	3724	5875	5778	4825	4826	4826	4826	4826	4826	4826
M-X PLUS BASELINE	126212	130886	137236	145126	151421	155453	159562	162259	167012	171145	175369	179419	183367
PERCENT DIFFERENCE FROM BASELINE	0.0	0.0	0.9	2.6	4.0	3.9	3.8	3.1	3.0	2.9	2.8	2.8	2.7
ALTERNATIVE 2													
K-6	0	0	612	1858	2871	2852	2793	2413	2413	2413	2413	2413	2413
7-9	0	0	306	929	1436	1426	1396	1207	1207	1207	1207	1207	1207
10-12	0	0	206	929	1436	1426	1396	1207	1207	1207	1207	1207	1207
TOTAL M-X RELATED	0	0	1224	3715	5743	5704	5595	4826	4826	4826	4826	4826	4826
M-X PLUS BASELINE	126212	130886	137236	145117	151329	155376	159360	162259	167012	171145	175369	179419	183367
PERCENT DIFFERENCE FROM BASELINE	0.0	0.0	0.9	2.6	3.9	3.8	3.6	3.1	3.0	2.9	2.8	2.8	2.7
ALTERNATIVE 4													
K-6	0	0	0	0	0	0	0	1843	1843	1843	1843	1843	1843
7-9	0	0	0	0	0	0	0	922	922	922	922	922	922
10-12	0	0	0	0	0	0	0	922	922	922	922	922	922
TOTAL M-X RELATED	0	0	0	0	0	0	0	922	922	922	922	922	922
M-X PLUS BASELINE	126212	130886	136012	141402	148197	153793	158438	165105	165872	170005	174229	178279	182227
PERCENT DIFFERENCE FROM BASELINE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	2.3	2.2	2.2	2.1	2.1
ALTERNATIVE 6													
K-6	0	0	0	0	0	0	0	1843	1843	1843	1843	1843	1843
7-9	0	0	0	0	0	0	0	922	922	922	922	922	922
10-12	0	0	0	0	0	0	0	922	922	922	922	922	922
TOTAL M-X RELATED	0	0	0	0	0	0	0	922	922	922	922	922	922
M-X PLUS BASELINE	126212	130886	136012	141402	148189	153782	158425	165089	165874	170003	174229	178279	182227
PERCENT DIFFERENCE FROM BASELINE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	2.3	2.2	2.2	2.1	2.1
ALTERNATIVE 6A													
K-6	0	0	612	1746	2256	2265	2334	2394	2394	2394	2394	2394	2394
7-9	0	0	306	873	1128	1133	1167	1197	1197	1197	1197	1197	1197
10-12	0	0	206	873	1128	1133	1167	1197	1197	1197	1197	1197	1197
TOTAL M-X RELATED	0	0	1225	3192	4512	4531	4658	4788	4788	4788	4788	4788	4788
M-X PLUS BASELINE	126212	130886	137237	144684	150098	154103	158443	162721	166974	171107	175331	179381	183329
PERCENT DIFFERENCE FROM BASELINE	0.0	0.0	0.9	2.5	3.1	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0

SOURCE: HDR SCIENCES. 1-NOV-80

Table 4.3.2.6-14.

PROJECTED BASELINE AND M-X INDUCED TEACHER REQUIREMENTS BY GRADE LEVEL, BY ALTERNATIVE, IN CLARK ASSUMING TREND BASELINE

ALTERNATIVE / NUMBER TEACHERS BY GRADE LEVEL	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BASELINE REQUIREMENTS													
PROPOSED ACTION													
K-6	5736	5949	6182	6427	6617	6798	6989	7178	7371	7559	7751	7935	8115
7-9	0	0	0	24	74	117	118	116	97	97	97	97	97
10-12	0	0	0	13	40	63	64	63	52	52	52	52	52
TOTAL M-X RELATED	0	0	0	14	42	66	67	66	55	55	55	55	55
M-X PLUS BASELINE	5736	5949	6234	6584	6863	7046	7233	7382	7575	7763	7955	8139	8319
PERCENT DIFFERENCE FROM BASELINE	0.0	0.0	0.0	2.4	3.7	3.6	3.5	2.8	2.7	2.6	2.6	2.5	2.5
ALTERNATIVE 1													
K-6	0	0	0	24	74	117	118	116	97	97	97	97	97
7-9	0	0	0	13	40	63	64	63	52	52	52	52	52
10-12	0	0	0	14	42	66	67	66	55	55	55	55	55
TOTAL M-X RELATED	0	0	0	52	157	248	244	204	204	204	204	204	204
M-X PLUS BASELINE	5736	5949	6234	6584	6863	7046	7233	7382	7575	7763	7955	8139	8319
PERCENT DIFFERENCE FROM BASELINE	0.0	0.0	0.0	2.4	3.7	3.6	3.5	2.8	2.7	2.6	2.6	2.5	2.5
ALTERNATIVE 2													
K-6	0	0	0	24	74	115	114	112	97	97	97	97	97
7-9	0	0	0	13	40	62	62	61	52	52	52	52	52
10-12	0	0	0	14	42	65	65	63	55	55	55	55	55
TOTAL M-X RELATED	0	0	0	52	157	243	241	236	204	204	204	204	204
M-X PLUS BASELINE	5736	5949	6234	6584	6860	7039	7225	7382	7575	7763	7955	8139	8319
PERCENT DIFFERENCE FROM BASELINE	0.0	0.0	0.0	2.4	3.7	3.5	3.4	2.8	2.7	2.6	2.6	2.5	2.5
ALTERNATIVE 4													
K-6	0	0	0	0	0	52	84	73	83	74	74	74	74
7-9	0	0	0	0	0	28	46	51	45	40	40	40	40
10-12	0	0	0	0	0	30	48	53	47	42	42	42	42
TOTAL M-X RELATED	0	0	0	0	0	110	178	197	176	156	156	156	156
M-X PLUS BASELINE	5736	5949	6182	6427	6727	6976	7186	7354	7527	7715	7907	8091	8271
PERCENT DIFFERENCE FROM BASELINE	0.0	0.0	0.0	0.0	1.7	2.6	2.8	2.5	2.1	2.1	2.0	2.0	2.0
ALTERNATIVE 6													
K-6	0	0	0	0	0	52	84	93	83	74	74	74	74
7-9	0	0	0	0	0	28	46	51	45	40	40	40	40
10-12	0	0	0	0	0	30	48	53	47	42	42	42	42
TOTAL M-X RELATED	0	0	0	0	0	110	178	196	174	156	156	156	156
M-X PLUS BASELINE	5736	5949	6182	6427	6727	6976	7185	7354	7527	7715	7907	8091	8271
PERCENT DIFFERENCE FROM BASELINE	0.0	0.0	0.0	0.0	1.7	2.6	2.8	2.5	2.1	2.1	2.0	2.0	2.0
ALTERNATIVE BA													
K-6	0	0	0	24	70	90	91	93	96	96	96	96	96
7-9	0	0	0	13	38	49	49	51	52	52	52	52	52
10-12	0	0	0	14	40	51	51	53	54	54	54	54	54
TOTAL M-X RELATED	0	0	0	52	147	191	191	197	202	202	202	202	202
M-X PLUS BASELINE	5736	5949	6234	6584	6863	7046	7233	7382	7575	7763	7955	8139	8317
PERCENT DIFFERENCE FROM BASELINE	0.0	0.0	0.0	2.3	2.9	2.8	2.8	2.8	2.7	2.7	2.6	2.5	2.5

SOURCE: MDR SCIENCES, 1-MDV-80

normal growth conditions. Under M-X Deployment Alternative 2, an operating base would be located near Delta within the jurisdiction of this school district. Population in-migration associated with base construction would occur by 1984 under this alternative, resulting in a number of school-aged dependents requiring educational services.

Table 4.3.2.6-15 presents the number of school-aged children expected by grade group for each M-X alternative between the years 1982 and 1994 on an annual basis. As indicated, Alternative 2 may add up to 420 additional pupils to the school district, an increase of approximately 16.0 percent over the 2,500 enrollments estimated to occur under baseline growth conditions. By 1989, the year of peak enrollment growth attributable to M-X, the increase over baseline growth under Alternative 2 approximates nearly 200.0 percent: at this time, baseline enrollments are anticipated to number 3,260.

Subsequent to peak year enrollment demands resulting from M-X, enrollment levels can be expected to stabilize, the level of which may be useful for long-range educational planning purposes. Table 4.3.2.6-15 indicates that the Millard County School District may have to provide long-term educational services for nearly 7,200 students should an M-X operating base be located near Delta. Of this total number of students requiring education, slightly more than half may be M-X induced. Should no operating base be located in Millard County, the school district would still receive additional demands for services as a result of spill-over effects of technical facility construction in adjacent counties. The short and long-term effects of these enrollment demands under Alternative 6 and the Proposed Action would be considerably less than under Alternative 2. No long-term enrollments attributable to M-X are anticipated under any of the remaining alternatives. Regardless of which M-X deployment alternative is selected, it is evident that given the posture of existing facility inadequacy to meet even the projected number of baseline enrollments expected for the area, that M-X related enrollments of both short and long-term duration will certainly accentuate the need for additional facilities and personnel.

Table 4.3.2.6-16 indicates the number of teachers which may be required to accommodate baseline and M-X related enrollment demand on a grade group basis for all years between 1982 and 1994. As was the case with enrollments, Alternative 2 will require the largest number of teachers. Alternative 2 may initially require 12 additional teachers to accommodate M-X related enrollment increase in 1984, necessitate nearly 255 by 1988, and require approximately 170 to accommodate long-term demands, an increase of more than 110.0 percent over the 150 teachers who will be necessary to accommodate long-term demands under normal growth conditions. It is likely that the school district may experience difficulty in attracting and retaining an adequate staffing level during both peak and long-term conditions.

The proportion of total enrollments and teachers required attributable to other projects in the area when compared to those attributable to M-X plus baseline growth is substantial. For example, under Alternative 2, in which a small operating base may be located near Delta, of the nearly 10,800 enrollments which the school district might expect during peak year 1988 more than 15.0 percent are other project related. This indicates that the already inadequate capability of the district to provide educational services would be further compounded by M-X and other project requirements.

Ely

White Pine County School District, which currently maintains an enrollment capacity of approximately 2,700, is not expected to experience enrollment demands in excess of capacity under projected normal growth conditions through 1994. Under M-X deployment Alternatives 3 and 5, an operating base near Ely would be located within the jurisdiction of this school district. Population in-migration associated with base construction would occur by 1985, resulting in a number of school-aged dependents requiring educational services.

Table 4.3.2.6-17 presents the number of school-aged children expected by grade group for each M-X alternative between the years 1982 and 1984 on an annual basis. As indicated, in 1985, Alternatives 3 and 5 may each add up to approximately 550 additional pupils to the school district, an increase of approximately 25.0 percent over the 2,250 pupils anticipated given normal baseline growth. When combining M-X-related enrollment demands with those required under normal growth conditions, it is evident that the school district will realize a need for additional facilities and staffing during this year. By 1988, the year of peak enrollment growth attributable to M-X, the percentage increase for Alternatives 3 and 5 may range between approximately 230.0 and 240.0 percent over the nearly 2,400 resident school-aged children forecast for the time period.

Subsequent to peak year, enrollment demands resulting from M-X, enrollment levels can be expected to stabilize, the level of which may be useful for long-range educational planning purposes. Table 4.3.2.6-17 indicates that the White Pine County School District may have to provide long-term educational services for approximately 6,800 pupils should an M-X operating base be located near Ely. Of this total, nearly 61.0 percent would be attributable to M-X. Should no operating base be located in White Pine County, the school district would still receive additional demands for educational services as a result of spillover effects of technical facility construction nearby and in adjacent counties. These effects, however, are anticipated to be of short duration (a four year period between 1985 and 1989) and result in an increase in enrollments over baseline of no larger than 76.0 percent during the peak year 1986 for Alternatives 1, 2, 4, 6, 8 under Nevada/Utah, and the Proposed Action, at which time 2,290 pupils will already require educational services under normal growth conditions.

Table 4.3.2.6-18 indicates the number of teachers which may be required to accommodate baseline and M-X-related enrollment demands on a grade group basis for all years between 1982 and 1994. As was the case with enrollments, Alternatives 3 and 5 will require the largest number of teachers. These alternatives may initially require six additional teachers to accommodate M-X-related enrollment increases in 1984 and necessitate nearly 240 by 1989. Approximately 175 teachers would be needed to accommodate long-term demands. This brings the total long-term teacher requirements to approximately 29.5 when combining M-X-related teachers required with those which would be required to accommodate baseline enrollment levels. It is likely that the school district may experience difficulty in attracting and retaining an adequate staffing level. All other alternatives are not expected to require additional teachers in the long term.

The proportion of total enrollments and teachers required attributable to other projects in the area when compared to those attributable to M-X plus baseline

Table 4.3.2.6-15.

PROJECTED BASELINE AND M-X INDUCED SCHOOL ENROLLMENTS BY GRADE LEVEL, BY ALTERNATIVE, IN MILLARD
ASSUMING TREND BASELINE

ALTERNATIVE / NUMBER PUPILS BY GRADE LEVEL	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BASELINE ENROLLMENTS	2498	2603	2719	2844	2969	2972	3037	3102	3166	3194	3218	3240	3257
PROPOSED ACTION													
K-6	0	0	141	495	434	488	735	277	7	7	7	7	7
7-9	0	0	71	248	217	244	367	4	4	4	4	4	4
10-12	0	0	71	248	217	244	367	4	4	4	4	4	4
TOTAL M-X RELATED	0	0	283	991	888	976	1470	553	14	14	14	14	14
M-X PLUS BASELINE	2498	2603	3002	3835	3777	3948	4507	3655	3180	3208	3232	3254	3271
PERCENT DIFFERENCE FROM BASELINE	0.0	0.0	10.4	34.8	29.8	32.8	48.4	17.8	0.4	0.4	0.4	0.4	0.4
ALTERNATIVE 2													
K-6	0	0	211	737	1620	2491	3013	2811	2219	1965	1961	1961	1961
7-9	0	0	105	368	810	1246	1506	1405	1110	982	981	981	981
10-12	0	0	105	368	810	1246	1506	1405	1110	982	981	981	981
TOTAL M-X RELATED	0	0	421	1474	3239	4983	6026	5622	4438	3930	3922	3922	3922
M-X PLUS BASELINE	2498	2603	3140	4318	6148	7955	9063	8724	7604	7124	7140	7162	7179
PERCENT DIFFERENCE FROM BASELINE	0.0	0.0	15.5	51.8	111.3	167.6	198.4	181.2	140.2	123.0	121.9	121.0	120.4
ALTERNATIVE 3													
K-6	0	0	141	476	430	493	739	281	11	11	11	11	11
7-9	0	0	71	240	217	246	370	140	6	6	6	6	6
10-12	0	0	71	248	219	246	370	140	6	6	6	6	6
TOTAL M-X RELATED	0	0	210	923	875	986	1478	562	23	23	23	23	23
M-X PLUS BASELINE	2498	2603	3002	3837	3784	3958	4515	3664	3189	3217	3241	3263	3280
PERCENT DIFFERENCE FROM BASELINE	0.0	0.0	10.4	34.7	30.1	33.2	48.7	18.1	0.7	0.7	0.7	0.7	0.7
ALTERNATIVE 6													
K-6	0	0	141	496	436	493	739	281	11	11	11	11	11
7-9	0	0	71	248	219	246	370	140	6	6	6	6	6
10-12	0	0	71	248	219	246	370	140	6	6	6	6	6
TOTAL M-X RELATED	0	0	283	993	875	986	1478	562	23	23	23	23	23
M-X PLUS BASELINE	2498	2603	3002	3837	3784	3958	4515	3664	3189	3217	3241	3263	3280
PERCENT DIFFERENCE FROM BASELINE	0.0	0.0	10.4	34.9	30.1	33.2	48.7	18.1	0.7	0.7	0.7	0.7	0.7

Table 4.3.2.6-16.

PROJECTED BASELINE AND M-X INDUCED TEACHER REQUIREMENTS BY GRADE LEVEL, BY ALTERNATIVE, IN MILLARD
ASSUMING TREND BASELINE

ALTERNATIVE / NUMBER TEACHERS BY GRADE LEVEL	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BASELINE REQUIREMENTS	113	118	123	129	132	135	138	141	143	145	146	147	148
PROPOSED ACTION													
K-6	0	0	6	20	17	20	29	11	0	0	0	0	0
7-9	0	0	3	11	9	11	16	6	0	0	0	0	0
10-12	0	0	3	11	10	11	17	6	0	0	0	0	0
TOTAL M-X RELATED	0	0	12	42	37	41	62	23	1	1	1	1	1
M-X PLUS BASELINE	113	118	135	171	169	176	200	164	144	146	147	148	149
PERCENT DIFFERENCE FROM BASELINE	0.0	0.0	9.7	32.5	28.0	30.3	44.9	16.3	0.7	0.7	0.7	0.7	0.7
ALTERNATIVE 2													
K-6	0	0	6	29	65	100	121	112	89	79	78	78	78
7-9	0	0	5	16	35	54	65	61	48	43	43	43	43
10-12	0	0	5	17	37	57	68	64	50	45	45	45	45
TOTAL M-X RELATED	0	0	18	62	137	210	254	237	187	166	166	166	166
M-X PLUS BASELINE	113	118	141	191	269	345	392	378	330	311	312	313	314
PERCENT DIFFERENCE FROM BASELINE	0.0	0.0	14.6	48.0	103.6	153.4	184.0	168.1	129.9	114.3	113.5	112.7	112.1
ALTERNATIVE 5													
K-6	0	0	6	20	16	20	30	11	0	0	0	0	0
7-9	0	0	3	11	10	11	16	6	0	0	0	0	0
10-12	0	0	3	11	10	11	17	6	0	0	0	0	0
TOTAL M-X RELATED	0	0	12	41	37	42	60	24	1	1	1	1	1
M-X PLUS BASELINE	113	118	135	171	169	177	200	165	144	146	147	148	149
PERCENT DIFFERENCE FROM BASELINE	0.0	0.0	9.7	32.5	26.0	31.1	44.9	17.0	0.7	0.7	0.7	0.7	0.7
ALTERNATIVE 6													
K-6	0	0	6	20	18	20	30	11	0	0	0	0	0
7-9	0	0	3	11	10	11	16	6	0	0	0	0	0
10-12	0	0	3	11	10	11	17	6	0	0	0	0	0
TOTAL M-X RELATED	0	0	12	42	37	42	62	24	1	1	1	1	1
M-X PLUS BASELINE	113	118	135	171	169	177	200	165	144	146	147	148	149
PERCENT DIFFERENCE FROM BASELINE	0.0	0.0	9.7	32.5	28.0	31.1	44.9	17.0	0.7	0.7	0.7	0.7	0.7

4-475

PRECEDING PAGE BLANK-NOT FILMED

SOURCE: HDR SCIENCES, 1-NOV-80

Table 4.3.2.6-17.

PROJECTED BASELINE AND M-X INDUCED SCHOOL ENROLLMENTS BY GRADE LEVEL, BY ALTERNATIVE, IN WHITE PINE
ASSURING TREND BASELINE

ALTERNATIVE / NUMBER PUPILS BY GRADE LEVEL		1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BASELINE ENROLLMENTS	2169	2190	2215	2243	2290	2336	2379	2429	2481	2528	2575	2620	2661	
PROPOSED ACTION														
K-6	0	0	0	0	275	867	327	127	16	0	0	0	0	0
7-9	0	0	0	0	138	433	163	64	8	0	0	0	0	0
10-12	0	0	0	0	138	433	163	64	8	0	0	0	0	0
TOTAL M-X RELATED	0	0	0	0	551	1734	654	255	33	0	0	0	0	0
M-X PLUS BASELINE	2169	2190	2215	2243	4024	2990	2634	2462	2481	2528	2575	2620	2661	
PERCENT DIFFERENCE FROM BASELINE	0.0	0.0	0.0	0.0	24.6	75.7	28.0	10.7	1.4	0.0	0.0	0.0	0.0	
 ALTERNATIVE 3														
K-6	0	0	66	602	2285	2694	2793	2826	2336	2072	2050	2060	2059	
7-9	0	0	33	301	1142	1347	1396	1413	1168	1036	1030	1030	1030	
10-12	0	0	33	301	1142	1347	1396	1413	1168	1036	1030	1030	1030	
TOTAL M-X RELATED	0	0	132	1203	4570	5389	5585	5652	4672	4144	4120	4119	4118	
M-X PLUS BASELINE	2169	2190	2347	3446	6860	7725	7964	8081	7153	6672	6695	6739	6779	
PERCENT DIFFERENCE FROM BASELINE	0.0	0.0	6.0	53.6	199.5	230.6	234.7	232.6	188.3	163.9	160.0	157.2	154.7	
 ALTERNATIVE 5														
K-6	0	0	66	602	2285	2694	2793	2826	2336	2072	2060	2060	2059	
7-9	0	0	33	301	1142	1347	1396	1413	1168	1036	1030	1030	1030	
10-12	0	0	33	301	1142	1347	1396	1413	1168	1036	1030	1030	1030	
TOTAL M-X RELATED	0	0	132	1203	4570	5389	5585	5652	4672	4144	4120	4119	4118	
M-X PLUS BASELINE	2169	2190	2347	3446	6860	7725	7964	8081	7153	6672	6695	6739	6779	
PERCENT DIFFERENCE FROM BASELINE	0.0	0.0	6.0	53.6	199.5	230.6	234.7	232.6	188.3	163.9	160.0	157.2	154.7	

SOURCE: HDR SCIENCES, 1-MOV-80

Table 4.3.2.6-18.

PROJECTED BASELINE AND M-X INDUCED TEACHER REQUIREMENTS BY GRADE LEVEL, BY ALTERNATIVE, IN WHITE PINE
ASSUMING TREND BASELINE

ALTERNATIVE / NUMBER TEACHERS BY GRADE LEVEL	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BASELINE REQUIREMENTS													
PROPOSED ACTION	98	99	100	101	104	106	108	110	112	114	117	119	120
K-6	0	0	0	11	35	13	5	1	0	0	0	0	0
7-9	0	0	0	6	19	7	3	0	0	0	0	0	0
10-12 ²	0	0	0	6	20	7	3	0	0	0	0	0	0
TOTAL M-X RELATED	0	0	0	23	73	28	11	1	0	0	0	0	0
M-X PLUS BASELINE	98	99	100	124	177	134	119	111	112	114	117	119	120
PERCENT DIFFERENCE FROM BASELINE	0.0	0.0	0.0	22.6	70.1	26.4	10.2	0.9	0.0	0.0	0.0	0.0	0.0
ALTERNATIVE 3													
K-6	0	0	3	24	91	108	112	113	93	83	82	82	82
7-9	0	0	1	13	50	59	61	61	51	45	45	45	45
10-12	0	0	1	14	52	61	63	64	53	47	47	47	47
TOTAL M-X RELATED	0	0	6	51	193	228	236	239	197	175	174	174	174
M-X PLUS BASELINE	98	99	106	152	297	334	344	349	309	289	291	293	294
PERCENT DIFFERENCE FROM BASELINE	0.0	0.0	6.0	50.0	185.4	214.7	218.2	216.4	174.6	152.3	148.6	146.1	143.8
ALTERNATIVE 5													
K-6	0	0	3	24	91	108	112	113	93	83	82	82	82
7-9	0	0	1	13	50	59	61	61	51	45	45	45	45
10-12	0	0	1	14	52	61	63	64	53	47	47	47	47
TOTAL M-X RELATED	0	0	6	51	193	228	236	239	197	175	174	174	174
M-X PLUS BASELINE	98	99	106	152	297	334	344	349	309	289	291	293	294
PERCENT DIFFERENCE FROM BASELINE	0.0	0.0	6.0	50.0	185.4	214.7	218.2	216.4	174.6	152.3	148.6	146.1	143.8

4-479

PRECEDING PAGE BLANK-NOT FILMED

SOURCE: MOR SCIENCES, 1-NOV-80

growth is substantial. For example, under Alternatives 3 and 5, in which a small operating base may be located near Ely, of the nearly 9,700 total enrollments which the school district might expect during peak year 1988 under a cumulative growth scenario, approximately 19.0 percent are other project related. This may further accentuate the realization by local school officials that the capacity problems which they are likely to encounter solely from M-X-related enrollment demands in 1985, will be greatly compounded in the long-term when also considering additional enrollment increments associated with other area projects.

Milford

M-X deployment Alternatives 5 and 6 and the Proposed Action all identify a potential operating base location in the vicinity of Milford. Construction of such a facility would generate population in-migration which would be distributed into Beaver County and to a lesser extent into Iron County. Associated with this population in-migration would be a number of school-aged dependents requiring educational services. The accommodation of M-X-related demands for educational services would be borne primarily by the Beaver and Iron County School Districts. Since M-X-related population in-migration is anticipated to occur at substantially higher levels into Beaver County, the following discussion will concentrate primarily upon the effects to the Beaver County School District.

Table 4.3.2.6-19 presents the number of school-aged children expected to enter the Beaver County School District by class grouping for each M-X alternative between the years 1982 and 1994 on an annual basis. As indicated, substantial initial enrollment additions to the Beaver County School District would occur in 1982 under Alternatives 5 and 6. Under the Proposed Action, initial enrollments would occur somewhat later, 1984. Under Alternatives 5 and 6, it is expected that as many as 780 enrollments may be generated as a result of M-X-related population in-migration, which constitutes a 65.0 percent increase over the approximately 1,200 students anticipated in projected baseline. It is evident that the Beaver County School District which maintains an enrollment capacity of approximately 1,700 students would experience problems with meeting enrollment demands in 1982. Under the Proposed Action, the initial number of M-X-attributable enrollments would be approximately 270 (in 1984), an increase of 21.0 percent over the nearly 1,300 pupils expected under normal growth conditions.

Peak levels of enrollments generated by M-X into Beaver County would occur in 1987. Depending on which of these alternatives in which an operating base may occur near Milford is ultimately selected, M-X-attributable enrollments may increase the number of enrollments in Beaver County by up to between 345.0 and 365.0 percent over normal projected growth conditions -- which indicate that approximately 1,340 local school-aged children would be utilizing educational facilities in the district.

Subsequent to peak year enrollment demands resulting from M-X, enrollment levels can be expected to stabilize, the level of which may be useful for long-range educational planning purposes. Table 4.3.2.6-19 indicates that under Alternatives 5 and 6 the Beaver County School District would require adequate facilities to accommodate approximately 6,350 pupils, of which approximately 77.0 percent would be attributable to M-X. Under the Proposed Action, the long-term requirement for educational services would be approximately 5,200 pupils of which

approximately 72.0 are M-X-attributable. Under all other M-X deployment alternatives in which an operating base would not be situated near Milford, long-term effects would be greatly reduced. The respective percentage increases over baseline growth under Alternatives 1, 2 and 3 would range between 15.0 and 25.0 percent. Under Alternative 8A, no long-term enrollment demands are expected. Regardless of which M-X deployment in which an operating base would be located near Milford is selected, it is evident that given the inadequate posture of existing facilities, M-X-related enrollments will certainly accentuate the need for both additional facilities and personnel.

The number of teachers required to accommodate M-X-related enrollment demands in Beaver County for Alternatives 5 and 6 in the long-term approximate 210, while for the Proposed Action, approximately three-quarters of this number would be required. This is in addition to the 65 teachers expected to be required under long-term normal growth conditions. The annual projected baseline and M-X-related teacher requirements between 1982 and 1994 for each grade group is expressed in Table 4.3.2.6-20 for the Beaver County School District.

In Beaver County, the proportion of total enrollments and teachers required attributable to other projects in the area when compared to those attributable to M-X plus baseline is substantial. For example, for Alternatives 5 and 6, under which a large operating base may be located near Milford, of the total number of additional enrollments which the Beaver County School District might expect as a result of M-X and other projects, 20.0 percent of the total cumulative effects are attributable to other projects. This indicates that the existing inadequate capability of the district to provide educational services to the extent required by M-X would be further compounded when also considering other project requirements.

Clovis

Curry County is comprised of four school districts. However, primary effects attributable to M-X-related activities are anticipated to center mainly upon Clovis Municipal School District. As a result, this discussion will focus upon this district, although effects may also be experienced by those which are adjacent, but to a lesser extent. Clovis Municipal School District, which currently maintains an enrollment capacity of approximately 10,200, is expected to experience enrollment demands in excess of capacity under projected normal growth conditions prior to 1982. This indicates that any additional demands attributable to M-X would result in stresses to the local educational system above the level which would occur under normal growth conditions. Under M-X deployment Alternatives 7 and 8 under Nevada/Utah, an operating base would be located within the jurisdiction of the school district near Clovis. Population in-migration associated with base construction would occur by 1982, resulting in a number of school-aged dependents requiring educational services.

Table 4.3.2.6-21 presents the number of school-aged children expected by grade group for M-X Alternatives between the years 1982 and 1994 on an annual basis. As indicated, in 1982, Alternatives 7 and 8 under Texas/New Mexico may each add up to between 890 and 935 additional pupils to the school district, an increase of between 7.5 and 8.5 percent over the 11,400 students expected under baseline growth. By 1989, the year of peak enrollment growth attributable to M-X,

Table 4.3.2-6-19.

PROJECTED BASELINE AND M-X INDUCED SCHOOL ENROLLMENTS BY GRADE LEVEL, BY ALTERNATIVE, IN BEAVER
ASSUMING TREND BASELINE

ALTERNATIVE / NUMBER PUPILS BY GRADE LEVEL	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BASELINE ENROLLMENTS	1211	1242	1276	1313	1329	1341	1353	1364	1377	1392	1408	1422	1434
PROPOSED ACTION	0	0	136	609	1516	2008	2237	2370	2023	1869	1869	1869	1869
K-6	0	0	68	304	758	1004	1119	1185	1012	935	935	935	935
7-9	0	0	68	304	758	1004	1119	1185	1012	935	935	935	935
10-12	0	0	271	1217	3033	4016	4474	4739	4047	3739	3739	3739	3739
TOTAL M-X RELATED	0	0	1547	2530	4362	5357	5827	6105	5424	5131	5147	5161	5173
M-X PLUS BASELINE	1211	1242	1276	1313	1329	1341	1353	1364	1377	1392	1408	1422	1434
PERCENT DIFFERENCE FROM BASELINE	0.0	0.0	21.2	92.7	228.1	299.3	330.5	346.9	293.9	268.4	265.5	262.9	260.7
ALTERNATIVE 1	0	0	51	360	468	232	192	170	132	126	126	126	126
K-6	0	0	26	180	234	116	96	85	66	63	63	63	63
7-9	0	0	26	180	234	116	96	85	66	63	63	63	63
10-12	0	0	102	720	937	465	384	340	263	253	252	252	251
TOTAL M-X RELATED	0	0	1378	2033	2266	1806	1737	1706	1640	1645	1640	1645	1685
M-X PLUS BASELINE	1211	1242	1276	1313	1329	1341	1353	1364	1377	1392	1408	1422	1434
PERCENT DIFFERENCE FROM BASELINE	0.0	0.0	8.0	70.5	34.7	28.4	24.9	19.1	18.2	17.9	17.7	17.5	17.5
ALTERNATIVE 3	20	51	150	448	538	270	233	226	181	170	169	169	169
K-6	10	25	75	224	269	135	116	113	91	85	85	85	85
7-9	10	25	75	224	269	135	116	113	91	85	85	85	85
10-12	40	102	299	896	1076	540	465	452	363	340	338	338	338
TOTAL M-X RELATED	1251	1344	1575	2209	2405	1881	1618	1740	1732	1746	1760	1770	1772
M-X PLUS BASELINE	1211	1242	1276	1313	1329	1341	1353	1364	1377	1392	1408	1422	1434
PERCENT DIFFERENCE FROM BASELINE	3.3	8.2	23.4	68.2	80.9	40.2	34.3	29.4	26.4	24.4	24.0	23.8	23.6
ALTERNATIVE 4	20	51	150	448	538	270	233	226	181	170	169	169	169
K-6	10	25	75	224	269	135	116	113	91	85	85	85	85
7-9	10	25	75	224	269	135	116	113	91	85	85	85	85
10-12	40	102	299	896	1076	540	465	452	363	340	338	338	338
TOTAL M-X RELATED	1251	1344	1575	2209	2405	1881	1618	1740	1732	1746	1760	1770	1772
M-X PLUS BASELINE	1211	1242	1276	1313	1329	1341	1353	1364	1377	1392	1408	1422	1434
PERCENT DIFFERENCE FROM BASELINE	3.3	8.2	23.4	68.2	80.9	40.2	34.3	33.1	26.4	24.4	24.0	23.8	23.6
ALTERNATIVE 5	320	814	1563	2302	2628	2311	2436	2468	2458	2458	2458	2458	2458
K-6	175	407	781	1191	1314	1155	1218	1234	1229	1229	1229	1229	1229
7-9	193	407	781	1191	1314	1155	1218	1234	1229	1229	1229	1229	1229
10-12	781	1627	3126	4763	5256	4622	4872	4936	4917	4917	4916	4916	4916
TOTAL M-X RELATED	1992	2869	4402	6076	6585	5963	6225	6302	6294	6307	6325	6330	6330
M-X PLUS BASELINE	64.5	131.0	244.8	362.7	395.2	344.4	319.9	361.3	357.0	353.0	349.1	345.6	342.8
PERCENT DIFFERENCE FROM BASELINE	44.5	131.0	244.8	362.7	395.2	344.4	319.9	361.3	357.0	353.0	349.1	345.6	342.8
ALTERNATIVE 6	390	814	1563	2382	2628	2311	2436	2468	2458	2458	2458	2458	2458
K-6	195	407	781	1191	1314	1155	1218	1234	1229	1229	1229	1229	1229
7-9	195	407	781	1191	1314	1155	1218	1234	1229	1229	1229	1229	1229
10-12	781	1627	3126	4763	5256	4622	4872	4936	4917	4917	4916	4916	4916
TOTAL M-X RELATED	1992	2869	4402	6076	6585	5963	6225	6302	6294	6307	6325	6330	6330
M-X PLUS BASELINE	64.5	131.0	244.8	362.7	395.2	344.4	319.9	361.3	357.0	353.0	349.1	345.6	342.8
PERCENT DIFFERENCE FROM BASELINE	44.5	131.0	244.8	362.7	395.2	344.4	319.9	361.3	357.0	353.0	349.1	345.6	342.8

SOURCE: HDR SCIENCES, 1-NOV-80

Table 4.3.2.6-20.
PROJECTED BASELINE AND M-X INDUCED TEACHER REQUIREMENTS BY GRADE LEVEL, BY ALTERNATIVE, IN BEAVEN
ASSUMING TREND BASELINE

ALTERNATIVE / NUMBER OF TEACHERS BY GRADE LEVEL	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BASELINE REQUIREMENTS													
PROPOSED ACTION	0	0	5	24	61	80	87	95	81	75	75	75	75
K-6	0	0	3	13	33	44	49	52	44	41	41	41	41
7-9	0	0	3	14	34	46	51	54	46	42	42	42	42
10-12	0	0	3	51	128	170	189	200	171	158	158	158	158
TOTAL M-X RELATED	0	0	11	110	168	230	250	262	233	221	222	222	223
M-X PLUS BASELINE	55	56	69	190	854	2117	2787	3071	3221	2732	2496	2448	2424
PERCENT DIFFERENCE FROM BASELINE	0.0	0.0	19.0	85.4	211.7	278.7	307.1	322.1	273.2	249.6	244.8	242.4	242.4
ALTERNATIVE 1													
K-6	0	0	2	14	19	9	8	7	5	5	5	5	5
7-9	0	0	1	8	10	5	4	3	3	3	3	3	3
10-12	0	0	1	8	11	5	4	3	3	3	3	3	3
TOTAL M-X RELATED	0	0	4	30	40	20	16	14	11	11	11	11	11
M-X PLUS BASELINE	55	56	62	69	100	80	77	76	73	74	75	75	76
PERCENT DIFFERENCE FROM BASELINE	0.0	0.0	6.9	50.3	66.2	32.8	26.0	22.5	17.6	17.4	17.2	17.0	16.9
ALTERNATIVE 3													
K-6	1	2	6	18	22	11	9	9	7	7	7	7	7
7-9	0	1	3	10	12	6	5	5	4	4	4	4	4
10-12	0	1	3	10	12	6	5	5	4	4	4	4	4
TOTAL M-X RELATED	2	4	13	38	45	23	20	19	15	14	14	14	14
M-X PLUS BASELINE	57	60	71	97	105	83	81	81	77	77	78	78	79
PERCENT DIFFERENCE FROM BASELINE	3.6	7.1	22.4	63.7	74.4	37.7	32.5	30.6	24.0	22.1	21.7	21.5	21.5
ALTERNATIVE 4													
K-6	1	2	6	18	22	11	9	9	7	7	7	7	7
7-9	0	1	3	10	12	6	5	5	4	4	4	4	4
10-12	0	1	3	10	12	6	5	5	4	4	4	4	4
TOTAL M-X RELATED	2	4	13	46	45	23	20	19	15	14	14	14	14
M-X PLUS BASELINE	57	60	71	97	105	83	81	81	77	77	78	78	79
PERCENT DIFFERENCE FROM BASELINE	3.6	7.1	22.4	63.7	74.4	37.7	32.5	30.6	24.0	22.1	21.7	21.5	21.5
ALTERNATIVE 5													
K-6	15	31	63	95	105	92	77	79	70	70	70	70	70
7-9	10	10	14	36	57	50	57	54	53	54	53	53	53
10-12	9	10	16	36	54	53	56	56	56	56	56	56	56
TOTAL M-X RELATED	37	49	132	201	222	192	206	208	208	208	208	208	208
M-X PLUS BASELINE	91	125	170	260	281	255	270	270	271	272	272	272	273
PERCENT DIFFERENCE FROM BASELINE	59.7	122.2	227.4	316.7	357.0	319.7	334.0	335.0	342.3	340.5	324.9	321.7	319.1
ALTERNATIVE 6													
K-6	16	33	63	95	105	92	77	79	70	70	70	70	70
7-9	0	10	34	52	57	50	53	54	53	53	53	53	53
10-12	7	16	36	54	60	53	55	56	56	56	56	56	56
TOTAL M-X RELATED	33	69	132	201	222	195	206	208	208	208	208	208	208
M-X PLUS BASELINE	88	125	190	260	282	255	270	270	271	272	272	272	273
PERCENT DIFFERENCE FROM BASELINE	59.7	122.2	227.4	316.7	357.0	319.7	334.0	335.0	342.3	340.5	324.9	321.7	319.1

SOURCE: NBR SCIENCES, 1-NOV-80

PRECEDING PAGE BLANK-NOT FILMED

1-485

Table 4.3.2.6-21.

PROJECTED BASELINE AND M-X INDUCED SCHOOL ENROLLMENTS BY GRADE LEVEL, BY ALTERNATIVE, IN CURRY
ASSUMING TREND BASELINE

ALTERNATIVE / NUMBER PUPILS BY GRADE LEVEL	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BASELINE ENROLLMENTS	11406	11442	11479	11515	11520	11525	11531	11536	11544	11520	11499	11479	11458
ALTERNATIVE 7	466	1050	1935	2686	2886	2773	2961	2927	2711	2711	2711	2711	2711
K-6	231	525	968	1343	1443	1387	1481	1463	1356	1356	1356	1356	1356
7-9	233	525	968	1343	1443	1387	1481	1463	1356	1356	1356	1356	1356
10-12	932	2100	3671	5372	5772	5847	5922	5854	5422	5422	5422	5422	5422
TOTAL M-X RELATED	12338	15350	16887	17292	17022	17453	17390	16966	16921	16921	16880	16880	16880
M-X PLUS BASELINE													
PERCENT DIFFERENCE FROM BASELINE	8.2	18.4	33.7	46.7	50.1	48.1	51.4	50.7	47.0	47.1	47.2	47.3	47.3
ALTERNATIVE 8B	42	190	848	1641	2176	2553	2587	2798	2467	2185	2185	2185	2185
K-6	21	95	424	821	1088	1276	1294	1399	1233	1092	1092	1092	1092
7-9	21	95	424	821	1088	1276	1294	1399	1233	1092	1092	1092	1092
10-12	84	379	1697	3282	4352	5105	5175	5996	4934	4370	4370	4370	4370
TOTAL M-X RELATED	11490	11821	13176	14797	15872	16630	16706	17132	16478	15890	15849	15828	15828
M-X PLUS BASELINE													
PERCENT DIFFERENCE FROM BASELINE	0.7	3.3	14.8	28.5	37.8	44.3	44.9	48.5	42.7	37.9	38.1	38.1	38.1

SOURCE: HDA SCIENCES, 1-NOV-80

PROJECTED BASELINE AND M-X INDUCED TEACHER REQUIREMENTS BY GRADE LEVEL, BY ALTERNATIVE, IN CURRY
ASSUMING TREND BASELINE

ALTERNATIVE / NUMBER TEACHERS BY GRADE LEVEL	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BASELINE REQUIREMENTS	918	520	521	523	523	523	524	524	524	523	522	521	520
ALTERNATIVE 7	19	42	77	107	115	111	118	117	108	108	108	108	108
K-6	10	23	42	58	63	60	64	64	59	59	59	59	59
7-9	11	24	44	61	66	63	67	67	62	62	62	62	62
10-12	39	89	163	227	244	234	250	247	229	229	229	229	229
TOTAL M-X RELATED	557	609	684	750	767	757	774	771	753	751	750	747	747
M-X PLUS BASELINE													
PERCENT DIFFERENCE FROM BASELINE	7.5	17.1	31.2	43.4	46.6	44.7	47.7	47.1	43.6	43.7	43.8	43.9	44.0
ALTERNATIVE 8B	?	8	34	66	87	102	103	112	99	87	87	87	87
K-6	1	4	18	36	47	55	56	61	54	47	47	47	47
7-9	1	4	19	37	49	58	59	64	56	50	50	50	50
10-12	4	16	72	139	184	216	219	236	208	185	185	185	185
TOTAL M-X RELATED	522	536	593	662	707	739	743	760	732	708	707	705	705
M-X PLUS BASELINE													
PERCENT DIFFERENCE FROM BASELINE	0.8	3.1	13.8	26.6	35.1	41.2	41.8	45.0	39.6	35.3	35.4	35.5	35.5

SOURCE: HDA SCIENCES, 1-NOV-80

School Facilities

the percentage increase over baseline growth for Alternatives 7 and 8 under Texas/New Mexico may range between approximately 50.0 (Alternative 7) and 52.0 percent (Alternative 8 under Texas/New Mexico). At this time, it is expected that nearly 11,550 resident school-aged children will be in need of educational services.

Subsequent to peak year enrollment demands resulting from M-X, enrollment levels can be expected to stabilize, the level of which may be useful for long range educational planning purposes. Table 4.3.2.6-21 indicates that the Clovis and adjacent school districts may have to provide long-term educational services for between 16,800 (Alternative 8 under Texas/New Mexico) and 16,900 pupils (Alternative 7), of which approximately 32.0 percent would be attributable to M-X, should an operating base be located near Clovis.

Alternatives 7 and 8 under Texas/New Mexico may initially require between 35 and 40 additional teachers to accommodate M-X-related enrollment increases in 1982, necessitate nearly 250 by 1988, and require between 225 and 230 to accommodate long-term demands. Since nearly 520 teachers would be required to accommodate just the projected long-term demands under a normal growth posture, the total long-term teacher requirement will approximate 750. It is possible that Clovis Municipal School District may encounter problems in attracting and retaining a staffing level of this magnitude.

Dalhart

M-X deployment Alternative 7 indicates that a potential operating base may be located in the vicinity of Dalhart. Construction of such a facility would generate population in-migration which would be distributed between Dallam and Hartley counties. Associated with this population in-migration would be a number of school-aged dependents requiring educational services. The accommodation of M-X-related demands for educational services would be shared primarily between the Dallam and Hartley Independent School Districts. Since M-X-related population in-migration is anticipated to occur at substantially higher levels into Hartley County, the following discussion will concentrate primarily upon the effects to the Hartley Independent School District, although effects upon the Dallam Independent School District will also be considered.

Tables 4.3.2.6-22 and 4.3.2.6-23 present the number of school-aged children expected to enter the Hartley and Dallam Independent School Districts respectively, by class grouping for each M-X alternative between the years 1982 and 1994 on an annual basis. As indicated, initial enrollment additions to both the Hartley and Dallam Independent School Districts would occur in 1984. The number of initial enrollments expected (about 90) would account for slightly less than 9.0 percent of the nearly 990 resident school-aged children forecast to already require educational services in Hartley County. In Dallam County, initial enrollments of approximately 100 would contribute approximately 5.0 percent over the 1,820 enrollments expected under normal growth conditions in 1984.

Peak levels of enrollment generated by M-X into Hartley and Dallam counties would occur in 1989 and 1988 respectively. M-X-attributable enrollments may increase the number of enrollments in Hartley County by up to between 360 and 370 percent over the nearly 1,100 enrollments expected under normal growth conditions. In Dallam County, peak level M-X-related enrollments would result in increases ranging between 130.0 and 140.0 percent over the number of projected baseline enrollments which are estimated to number approximately 1,900.

School Facilities

Subsequent to peak year enrollment demands resulting from M-X, enrollment levels can be expected to stabilize, the level of which may be useful for long-range educational planning purposes. Table 4.3.2.6-22 indicates that the Hartley Independent School District may require adequate facilities to accommodate approximately 4,500 pupils of which between approximately 70.0 and 75.0 percent would be attributable to M-X. Long-term enrollment increases to the Dallam County School District are expected to result in a stabilized enrollment level of approximately 2,450 students, of which approximately 16.0 percent would be attributable to M-X.

The number of teachers required to accommodate M-X-related enrollment demands in Hartley County under Alternative 7 in the long-term approximate 140, while for Dallam County, approximately 16 would be required. The long-term teacher requirement attributable to M-X (140) when combined with the 54 expected to be needed to serve long-term baseline enrollment levels can be expected to create difficulties for the Hartley Independent School District in terms of the ability of the local area to attract and retain a staffing level of this magnitude.

Table 4.3.2.6-22.

PROJECTED BASELINE AND M-X INDUCED SCHOOL ENROLLMENTS BY GRADE LEVEL, BY ALTERNATIVE, IN HARTLEY
ASSUMING TREND BASELINE

ALTERNATIVE / NUMBER PUPILS BY GRADE LEVEL	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BASELINE ENROLLMENTS	948	969	970	1011	1032	1053	1073	1094	1115	1136	1157	1177	1198
ALTERNATIVE 7	0	0	44	332	1171	1749	1983	2000	1669	1650	1650	1650	1650
K-6	0	0	22	166	585	874	992	1000	834	825	825	825	825
7-9	0	0	22	166	585	874	992	1000	834	825	825	825	825
10-12	0	1	87	663	2341	3497	3867	4000	3317	3301	3301	3301	3301
TOTAL M-X RELATED	0	1	87	1077	1674	3373	4550	5040	5094	4437	4458	4478	4499
M-X PLUS BASELINE	948	970	1011	1032	1053	1073	1094	1115	1136	1157	1177	1198	1198
PERCENT DIFFERENCE FROM BASELINE	0.0	0.1	8.8	65.6	226.8	332.1	369.4	365.4	299.2	290.5	285.3	280.3	275.4
ALTERNATIVE 8B	0	0	0	3	60	329	360	107	0	1	0	0	0
K-6	0	0	0	1	34	164	180	54	4	0	0	0	0
7-9	0	0	0	1	34	164	180	54	4	0	0	0	0
10-12	0	0	0	6	137	657	720	214	16	2	0	0	0
TOTAL M-X RELATED	0	0	0	1017	1169	1710	1793	1308	1138	1157	1177	1198	1198
M-X PLUS BASELINE	948	969	990	1017	1169	1710	1793	1308	1138	1157	1177	1198	1198
PERCENT DIFFERENCE FROM BASELINE	0.0	0.0	0.0	0.6	13.3	62.4	67.4	19.6	1.4	0.2	0.0	0.0	0.0
SOURCE HDR SCIENCES, 1-NOV-80													

Table 4.3.2.6-23.

PROJECTED BASELINE AND M-X INDUCED SCHOOL ENROLLMENTS BY GRADE LEVEL, BY ALTERNATIVE, IN DALLAM
ASSUMING TREND BASELINE

ALTERNATIVE / NUMBER PUPILS BY GRADE LEVEL	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BASELINE ENROLLMENTS	1780	1801	1822	1845	1864	1884	1903	1924	1949	1978	2009	2040	2072
ALTERNATIVE 7	0	0	48	255	651	1094	1286	775	365	225	194	193	193
K-6	0	0	24	128	325	547	643	388	182	112	97	96	96
7-9	0	0	24	128	325	547	643	388	182	112	97	96	96
10-12	0	0	97	511	1301	2187	2573	1551	729	449	388	386	386
TOTAL M-X RELATED	0	0	1919	2357	3165	4072	4478	3477	2679	2427	2397	2427	2459
M-X PLUS BASELINE	1780	1801	1822	1845	1864	1884	1903	1924	1949	1978	2009	2040	2072
PERCENT DIFFERENCE FROM BASELINE	0.0	0.0	5.3	27.7	49.8	116.0	135.0	80.5	37.4	22.7	19.3	18.9	18.6
ALTERNATIVE 8B	0	0	0	2	49	209	428	231	11	0	0	0	0
K-6	0	0	1	25	104	214	116	5	0	0	0	0	0
7-9	0	0	1	25	104	214	116	5	0	0	0	0	0
10-12	0	0	4	98	417	856	463	21	0	0	0	0	0
TOTAL M-X RELATED	0	0	1849	1962	2302	2761	2389	1970	1978	2009	2040	2072	2072
M-X PLUS BASELINE	1780	1801	1822	1845	1864	1884	1903	1924	1949	1978	2009	2040	2072
PERCENT DIFFERENCE FROM BASELINE	0.0	0.0	0.0	0.2	5.3	22.1	44.9	24.0	1.1	0.0	0.0	0.0	0.0
SOURCE HDR SCIENCES, 1-NOV-80													

HEALTH SERVICES PERSONNEL

INTRODUCTION (4.3.2.6.2.1)

Attracting and retaining physicians, dentists, and other health services personnel in rural areas has long been a major problem. Consequently, the level of health care services tends to be substandard in rural towns. If this service is overwhelmed by a sudden influx of population, without the provision of supplemental care, the problem could become critical.

Needs for health service personnel, including physicians, nurses, dentists and mental health workers, are based on population residing in local communities. Military personnel and dependents are expected to use health services provided on base and contractors are expected to provide some health services at construction camps. Private health services will be required for civilian employees, indirect workers, and their dependants.

Permanent health service personnel are more easily attracted to larger urban areas such as Las Vegas. The Coyote Spring alternatives are projected to fill service personnel positions more easily than the more rural OB sites. The difference between the long term needs and the peak year needs must be filled with temporary health service personnel, or left unfilled.

The measure of impact is the number of temporary health service personnel required, expressed as a percentage, over the projected health service personnel requirements in the peak year, including M-X induced needs plus the baseline needs. If the temporary personnel needs exceed the base line needs by 15 percent or more, the impact is considered to be significant. This may vary in any local community due to specific conditions.

The following sections discuss the aggregate health services personnel needs.

Health Services Personnel--Proposed Action

PROPOSED ACTION (4.3.2.6.2.2)

Deployment Region Impacts

Table 4.3.2.6-24 shows the peak-year and long term requirements, along with the cumulative peak-year and long term requirements of M-X and other projects anticipated in the deployment region. The requirements peak in 1987 at 270 personnel, representing a 2.3 percent increase over baseline. The cumulative M-X plus other projects peak-year total is 475 personnel, a 4.1 percent increase over baseline. The long term requirements are for only 15 personnel, (0.1 percent more than baseline needs), in 1994. Other projects increase the long term requirements to 150 personnel, (2.7 percent more than baseline). There is a difference of 255 personnel between the peak year and long term requirements. This would require 255 temporary health service personnel in the peak year and would represent 2.2 percent of total requirements including M-X. With other projects the requirement for temporary personnel would be increased to 2.7 percent. This need for temporary personnel is not significant at the deployment region level, although local impacts within the region could be significant.

Counties Affected By Base Locations

The Clark County peak-year requirements total 114 personnel, or 3.0 percent more than the baseline requirements. Other projects bring the total to 122 personnel, which represents a 3.2 percent increase over baseline. M-X is projected to require no additional personnel in the long term. The number of temporary health service personnel can be expected to be large but not significant. Beaver County, Utah will experience significant impacts which would be compounded by other projects. The Beaver County peak-year M-X induced requirements total 55, some 167 percent over baseline, while M-X plus other projects would bring the figure to 89 personnel, or 270 percent over baseline. After construction activities cease requirements fall off to reach a permanent need for 13 personnel, some 37 percent over baseline. M-X plus other projects would increase the number to 47, or 134 percent above baseline. The peak year requirements will exceed the long-term impact on Beaver County, because 48 percent of the peak year needs must be filled with temporary health service personnel. If other projects did not occur, the percent of temporary personnel would be 34 percent, still a significant impact on the existing health services. Both Lincoln County in Nevada and Iron County in Utah would experience spillover effects from Coyote Spring and Milford respectively. Lincoln County could be expected to have a significant impact with 22 percent of the peak year personnel being temporary.

Counties Affected By Other DDA Activities

All other counties in the deployment region would experience short-lived requirements, some of which would be significant. This would be true, for example, in Eureka County, Nevada. The peak-year requirement is for 12 personnel and no long term personnel. The temporary health service requirements are 60 percent of the peak year baseline. This could cause a significant impact. Other significantly impacted counties will be White Pine, Nye, and Juab, where the temporary health service personnel requirements are 19.4, 18.9, and 16.4 percent of the peak year baseline requirements respectively. When other projects are taken into account, White Pine's and Juab's temporary needs increase to 47 and 30 percent. Millard County would be impacted with a 26 percent temporary personnel need in the peak year. The remaining counties, Washington, Salt Lake, and Utah, while having peak-year personnel needs, would not be significantly impacted.

Table 4.3.2.6-24. (page 1 of 3)

NEVADA/UTAH
HEALTH SERVICES PERSONNEL REQUIREMENTS

DEPLOYMENT REGION			
ALTER-NATIVE	PEAK YEAR		LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)		
PROP. ACTION	270 (2.3)	15 (0.1)	
1	270 (2.3)	15 (0.1)	
2	265 (2.3)	13 (0.1)	
3	259 (2.2)	33 (0.2)	
4	265 (2.3)	21 (0.2)	
5	258 (2.2)	32 (0.2)	
6	263 (2.3)	20 (0.2)	
8	96 (0.9)	0 (0.0)	
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)		
PROP. ACTION	475 (4.1)	150 (1.1)	
1	478 (4.1)	150 (1.1)	
2	473 (4.2)	148 (1.1)	
3	468 (4.1)	167 (1.3)	
4	473 (4.1)	155 (1.2)	
5	466 (4.0)	167 (1.3)	
6	471 (4.1)	155 (1.2)	
8	306 (2.7)	135 (1.0)	

CLARK COUNTY, NV.			
ALTER-NATIVE	PEAK YEAR		LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)		
PROP. ACTION	114 (3.0)	0 (0)	
1	114 (3.0)	0 (0)	
2	110 (2.9)	0 (0)	
3	2 (0.1)	0 (0)	
4	79 (2.0)	0 (0)	
5	2 (0.1)	0 (0)	
6	79 (2.0)	0 (0)	
8	69 (1.8)	0 (0)	
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)		
PROP. ACTION	122 (3.2)	6 (0.1)	
1	122 (3.2)	6 (0.1)	
2	118 (3.1)	6 (0.1)	
3	10 (0.3)	6 (0.1)	
4	87 (2.2)	6 (0.1)	
5	10 (0.3)	6 (0.1)	
6	87 (2.2)	6 (0.1)	
8	77 (2.0)	6 (0.1)	

EUREKA COUNTY, NV.			
ALTER-NATIVE	PEAK YEAR		LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)		
PROP. ACTION	12 (150.0)	0 (0)	
1	12 (150.0)	0 (0)	
2	12 (150.0)	0 (0)	
3	12 (150.0)	0 (0)	
4	12 (150.0)	0 (0)	
5	12 (150.0)	0 (0)	
6	12 (150.0)	0 (0)	
8	0 (-0.0)	0 (0)	
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)		
PROP. ACTION	12 (150.0)	0 (0)	
1	12 (150.0)	0 (0)	
2	12 (150.0)	0 (0)	
3	12 (150.0)	0 (0)	
4	12 (150.0)	0 (0)	
5	12 (150.0)	0 (0)	
6	12 (150.0)	0 (0)	
8	0 (-0.0)	0 (0)	

LINCOLN COUNTY, NV.			
ALTER-NATIVE	PEAK YEAR		LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)		
PROP. ACTION	9 (33.3)	1 (3.2)	
1	10 (37.0)	2 (6.5)	
2	9 (33.3)	0 (0.0)	
3	9 (33.3)	1 (3.2)	
4	10 (37.0)	2 (6.5)	
5	8 (29.6)	0 (0.0)	
6	9 (33.3)	1 (3.2)	
8	6 (22.2)	0 (0.0)	
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)		
PROP. ACTION	9 (33.3)	1 (3.2)	
1	10 (37.0)	2 (6.5)	
2	9 (33.3)	0 (0.0)	
3	9 (33.3)	1 (3.2)	
4	9 (33.3)	2 (6.5)	
5	8 (29.6)	0 (0.0)	
6	9 (33.3)	1 (3.2)	
8	6 (22.2)	0 (0.0)	

Table 4.3.2.6-24. (page 2 of 3)

NEVADA/UTAH
HEALTH SERVICES PERSONNEL REQUIREMENTS

JUAB COUNTY, UT.			
ALTER-NATIVE	PEAK YEAR		LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)		
PROP. ACTION	9 (19.6)	0 (0)	
1	9 (19.6)	0 (0)	
2	10 (21.7)	0 (0)	
3	9 (19.6)	0 (0)	
4	9 (19.6)	0 (0)	
5	9 (19.6)	0 (0)	
6	9 (19.6)	0 (0)	
8	9 (0)	0 (0)	
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)		
PROP. ACTION	25 (54.3)	4 (7.4)	
1	25 (24.3)	4 (7.4)	
2	26 (56.5)	4 (7.4)	
3	25 (54.3)	4 (7.4)	
4	25 (54.3)	4 (7.4)	
5	25 (54.3)	4 (7.4)	
6	25 (54.3)	4 (7.4)	
8	16 (34.8)	4 (7.4)	

MILLARD COUNTY, UT.			
ALTER-NATIVE	PEAK YEAR		LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)		
PROP. ACTION	11 (14.1)	0 (0)	
1	11 (14.1)	0 (0)	
2	65 (84.4)	13 (15.7)	
3	11 (14.1)	0 (0)	
4	11 (14.1)	0 (0)	
5	12 (15.4)	0 (0)	
6	12 (15.4)	0 (0)	
8	11 (14.9)	0 (0)	
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)		
PROP. ACTION	55 (70.5)	21 (25.3)	
1	55 (70.5)	21 (25.3)	
2	115 (149.4)	34 (41.0)	
3	55 (70.5)	21 (25.3)	
4	55 (70.5)	21 (25.3)	
5	55 (70.5)	21 (25.3)	
6	55 (70.5)	21 (25.3)	
8	60 (81.0)	21 (25.3)	

UTAH/SALT LAKE COUNTY, UT.			
ALTER-NATIVE	PEAK YEAR		LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)		
PROP. ACTION	63 (0.9)	0 (0)	
1	60 (0.9)	0 (0)	
2	67 (1.0)	0 (0)	
3	68 (1.0)	0 (0)	
4	64 (0.9)	0 (0)	
5	70 (1.0)	0 (0)	
6	65 (0.9)	0 (0)	
8	0 (0.0)	0 (0)	
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)		
PROP. ACTION	109 (1.6)	33 (0.4)	
1	109 (1.6)	33 (0.4)	
2	115 (1.7)	33 (0.3)	
3	49 (0.7)	33 (0.4)	
4	113 (1.6)	33 (0.4)	
5	118 (1.7)	33 (0.4)	
6	114 (1.6)	33 (0.4)	
8	49 (0.7)	33 (0.4)	

WASHINGTON COUNTY, UT.			
ALTER-NATIVE	PEAK YEAR		LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)		
PROP. ACTION	3 (1.5)	0 (0.0)	
1	5 (2.6)	1 (0.4)	
2	0 (0.0)	0 (0.0)	
3	8 (4.3)	2 (0.9)	
4	8 (4.3)	2 (0.9)	
5	5 (2.7)	1 (0.4)	
6	5 (2.7)	1 (0.4)	
8	0 (0.0)	0 (0.0)	
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)		
PROP. ACTION	3 (15.)	0 (0.0)	
1	5 (2.6)	1 (0.4)	
2	0 (0.0)	0 (0.0)	
3	8 (4.3)	2 (0.9)	
4	8 (4.3)	2 (0.9)	
5	5 (2.7)	1 (0.4)	
6	5 (2.7)	1 (0.4)	
8	0 (0.0)	0 (0.0)	

Table 4.3.2.6-24. (page 3 of 3)

NEVADA/UTAH
HEALTH SERVICES PERSONNEL REQUIREMENTS

NYE COUNTY, NV.			
ALTER-NATIVE	PEAK YEAR		LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)		
PROP. ACTION	21 (27.3)	0 (0)	
1	21 (27.3)	0 (0)	
2	21 (27.3)	0 (0)	
3	21 (27.3)	0 (0)	
4	21 (27.3)	0 (0)	
5	21 (27.3)	0 (0)	
6	21 (27.3)	0 (0)	
8	9 (12.5)	0 (0)	
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)		
PROP. ACTION	18 (25.0)	0 (0)	
1	21 (27.3)	0 (0)	
2	21 (27.3)	0 (0)	
3	21 (27.3)	0 (0)	
4	21 (27.3)	0 (0)	
5	21 (27.3)	0 (0)	
6	21 (27.3)	0 (0)	
8	9 (12.5)	0 (0)	

WHITE PINE COUNTY, NV.			
ALTER-NATIVE	PEAK YEAR		LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)		
PROP. ACTION	14 (24.1)	0 (0)	
1	14 (24.1)	0 (0)	
2	14 (24.1)	0 (0)	
3	78 (132.2)	13 (19.1)	
4	14 (24.1)	0 (0)	
5	78 (132.2)	13 (19.1)	
6	14 (24.1)	0 (0)	
8	0 (0.0)	0 (0)	
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)		
PROP. ACTION	52 (89.7)	32 (47.1)	
1	52 (89.7)	32 (47.1)	
2	52 (89.7)	32 (47.1)	
3	129 (218.6)	45 (66.2)	
4	52 (89.7)	32 (47.1)	
5	129 (218.6)	45 (66.2)	
6	52 (89.7)	32 (47.1)	
8	52 (89.7)	32 (47.1)	

BEAVER COUNTY, UT.			
ALTER-NATIVE	PEAK YEAR		LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)		
PROP. ACTION	55 (166.7)	13 (37.1)	
1	6 (18.2)	1 (2.9)	
2	6 (18.2)	0 (0)	
3	9 (27.3)	2 (5.7)	
4	9 (27.3)	2 (5.7)	
5	75 (234.4)	17 (48.6)	
6	75 (234.4)	17 (48.6)	
8	7 (21.2)	0 (0)	
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)		
PROP. ACTION	89 (269.7)	47 (134.3)	
1	52 (157.6)	34 (97.1)	
2	52 (157.6)	34 (97.1)	
3	53 (160.6)	35 (100.0)	
4	53 (160.6)	35 (100.0)	
5	114 (356.3)	51 (145.7)	
6	114 (356.3)	51 (145.7)	
8	41 (124.2)	34 (97.1)	

IRON COUNTY, UT.			
ALTER-NATIVE	PEAK YEAR		LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)		
PROP. ACTION	6 (4.2)	1 (0.6)	
1	56 (38.9)	11 (6.7)	
2	2 (1.4)	0 (0.0)	
3	74 (54.4)	15 (9.1)	
4	74 (54.4)	15 (9.1)	
5	11 (7.9)	1 (0.6)	
6	11 (7.9)	1 (0.6)	
8	1 (0.7)	0 (0.0)	
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)		
PROP. ACTION	6 (4.2)	1 (0.6)	
1	56 (38.9)	13 (7.9)	
2	3 (2.1)	2 (1.2)	
3	75 (55.1)	17 (10.3)	
4	75 (55.1)	17 (10.3)	
5	12 (8.6)	3 (1.8)	
6	12 (8.6)	3 (1.8)	
8	1 (0.7)	0 (0.0)	

Mitigative Measures

In communities experiencing rapid growth there is usually pressure on existing hospitals, physicians, dentists, ambulance services, and mental health and community clinics. Hospital emergency rooms become substitutes for family physicians. Services cannot be expanded rapidly enough to meet demands. An environment and facilities must be provided to attract health care professionals to the area. One measure might be to ensure adequate housing and to minimize disruption to the quality of life. Strategies could be implemented to attract and keep necessary personnel, including: development of incentive programs to recruit physicians; development of satellite medical centers; employment of physician assistants and the development of ample public health nursing agencies; setting up programs such as alcohol and drug abuse centers; and the provision of ambulance service to regional hospitals. Strategies that the states can implement are: an interstate aircraft ambulance network, permitting rapid transport of accident victims to regional hospitals; planning the coordination of public health resources and the provision of technical and financial assistance from state health departments. Federal strategies that may help effected communities overcome shortfalls include: using physicians in public health service to staff rural clinics; federal programs to provide financial assistance for hospitals and health facilities; and assistance for health services. The construction contractor could provide temporary facilities, mobile or modular units, which could be used during the construction period and converted to local use following construction.

ALTERNATIVE 1 (4.3.2.6.2.3)

Under this alternative, the DDA facilities remain the same as for the Proposed Action; the first operating base remains at Coyote Spring Valley, but the second operating base is shifted from Milford to Beryl, in Iron County, Utah. There are no significant differences between the Proposed Action and Alternative 1 at the regional level. The only significant differences would occur at the individual county level, in Beaver and Iron counties in Utah. With the second operating base no longer in Beaver County, the Beaver County peak-year M-X induced requirements decline to only 11 percent of those needed under the Proposed Action, or just 6 personnel. Its long term needs are also reduced. The temporary health service personnel requirements for the peak years are 13 percent over the baseline requirements. The cumulative impact of M-X and other projects is likewise reduced. Iron County now is projected to have M-X induced peak-year requirements of some 56 health services personnel, or 39 percent above baseline requirements, and long term needs of 11 persons, or 7 percent over baseline. This will require 45 temporary health service employees which will be 23 percent of the base line requirement, slightly less when other projects are included. This number of temporary health service personnel will present health service problems during the peak construction period.

ALTERNATIVE 2 (4.3.2.6.2.4)

Under Alternative 2, the DDA facilities remain the same as the Proposed Action, the Coyote Spring OB remains the same, and the other OB is moved from Milford to Delta in Millard County. Since only the second operating base and spillover effects are different, there are no significant differences between Alternative 2 and the Proposed Action at the deployment region level. At the individual county level, namely in Beaver, Millard and Washington Counties in Utah,

Health Services Personnel--Alternatives 2, 3, 4

differences would occur. Beaver County's M-X related peak-year health services personnel requirements total 6 individuals, some 18 percent over baseline, and 18 percent less than those required in the peak-year of the Proposed Action. There are no long term needs, and the number of temporary health service personnel would be 15 percent, considerably less than that anticipated in Beaver County under the Proposed Action. Other projects would increase the temporary personnel to 21 percent. Millard County would experience an impact significantly different than that expected under the Proposed Action. Its peak-year needs total 65 personnel, some 84 percent above baseline, and its long-term requirements come to 13 individuals, or 16 percent over baseline. The difference between the long-term needs and the peak-year needs could be expected to create a need for temporary personnel equal to 13 percent of the base line increased to 42 percent with the cumulative impact of M-X and other projects. This would be a significant impact. Washington County is not expected to be impacted.

ALTERNATIVE 3 (4.3.2.6.2.5)

Under Alternative 3, the DDA facilities remain essentially the same as under the Proposed Action, the two operating base locations change, moving from Coyote Spring and Milford, to Beryl in Iron County, Utah and to Ely in White Pine County, Nevada. As a result, though there are no significant differences at the regional level, the differences occur at the county level, particularly in Clark and White Pine counties in Nevada and Beaver, Iron and Washington counties in Utah. With the first operating base no longer in Clark County, its peak-year needs are now insignificant, at less than 2 percent of those under the Proposed Action. White Pine County's impacts became significant. Its peak-year requirements are some 5.6 times as large, with 78 health services personnel called for. Since its long-term needs are for only 13 M-X related health personnel, the resultant need for temporary personnel could be 47 percent of the peak-year cumulative requirements. If there were no other projects, this need for temporary employees would be reduced to 45 percent, still significant. Beaver County is expected to require only 16 percent as many health personnel as under the Proposed Action, an insignificant impact, although other projects would tend to exacerbate the situation and contribute to a significant peak-year requirement for temporary personnel equal to 21 percent of the baseline.

With the first operating base in Iron County, its impacts will be significantly greater than those experienced under the Proposed Action. The peak-year requirements call for 74 health personnel, some 54 percent above baseline, while its long term needs are for 15 additional personnel. A need for temporary personnel equal to 28 percent of the baseline in the peak-year is expected. Washington County would probably experience long-term spillover effects from the adjacent county. The impacts are not significant.

ALTERNATIVE 4 (4.3.2.6.2.6)

Under Alternative 4, while the DDA facilities remain essentially the same as under the Proposed Action, the two base locations differ. The first operating base, having been moved from Coyote Spring to Beryl in Iron County, and the second operating base from Milford to Coyote Spring in Clark County. There are no significant differences between Alternative 4 and the Proposed Action at the regional level, but there are at the county level, specifically in Clark County, in Nevada and Beaver, Iron and Washington counties in Utah. With the second

operating base in Clark County, instead of the first operating base under the Proposed Action, requirements are projected to be only 69 percent of those under the Proposed Action, or 79 personnel, representing a 2 percent increase over baseline. Even with no long term needs, the resultant need for temporary health service personnel is insignificant compared to the personnel already in Clark County. Beaver County, without the operating base near Milford, will also have far fewer personnel needs in the peak-year than under the Proposed Action. When other projects are added, the cumulative need for temporary personnel can be expected to be about 21 percent of the baseline in the peak construction year. Iron County, with the first operating base, is projected to have a peak-year health personnel need of 74, 54 percent over baseline and a long term need for 15. This would require temporary personnel equal to 28 percent of the baseline in the peak-year, compared to only 3 percent under the Proposed Action. Washington County, although experiencing long term impacts, would not be significantly affected.

ALTERNATIVE 5 (4.3.2.6.2.7)

Under Alternative 5, the DDA facilities remain essentially the same as under the Proposed Action. There are no significant differences at the regional level. With the first operating base shifted from Coyote Spring to Milford in Beaver County, and the second operating base changed from Milford to Ely in White Pine County, there are significant differences between Alternative 5 and the Proposed Action at the county level, particularly in Clark and White Pine counties in Nevada and Beaver and Iron counties in Utah. In Clark County, for example, the M-X induced personnel requirements are only 2 percent of those under the Proposed Action in the peak year, and are insignificant. The White Pine County peak-year requirements are both significantly different and larger, totalling some 78 health service personnel, or 132 percent greater than the baseline needs. Since the long term needs are for only 13 personnel, the anticipated need for temporary personnel is 47 percent of baseline in the peak year. Beaver County is projected to have a still larger need for temporary personnel of 54 percent of baseline requirements in the peak-year, since its peak requirements of 75 personnel far exceed its long term need of just 17. In both counties, other projects would reduce these needs for temporary personnel a little. Iron County would experience almost double the peak-year needs under Alternative 5 as under the Proposed Action, but a need for temporary personnel of only 7 percent of baseline requirements is anticipated and should not prove disruptive.

ALTERNATIVE 6 (4.3.2.6.2.8)

Under Alternative 6 the DDA facilities remain the same as under the Proposed Action. At the regional level there are no significant differences between Alternative 6 and the Proposed Action. With the first operating base in Milford and the second operating base in Coyote Spring, the impacts are different for Clark and Iron counties. Clark County has 69 percent of the peak-year requirements of the Proposed Action. Beaver County's peak-year requirements are some 36 percent greater than those under the Proposed Action, but the anticipated need for temporary personnel would not be significantly different; 54 versus 48 percent of the baseline, respectively. Iron County's peak-year impacts are almost double those under the Proposed Action, 11 personnel, or 8 percent above baseline, but the anticipated need for temporary personnel, even though double that under the Proposed Action is still not large enough to be significant.

ALTERNATIVE 7 (4.3.2.6.2.9)

Under Alternative 7 the health services personnel requirements impact is caused by the decision to deploy the M-X system in Texas/New Mexico, with bases near Clovis and Dalhart. Since the regional and local labor markets for health service personnel are not large enough to provide the necessary labor, the balance must be met by in-migrants, all of whom would require health services. The impact of requirements, particularly the long term ones, would be felt in the two operating base communities and in a few adjacent counties affected by spillover. Major impacts will be felt, to varying degrees throughout the deployment region counties as construction of the DDA facilities proceeds, peaks and culminates.

The peak-year M-X induced health services personnel requirements for the Texas/New Mexico deployment region total 306 (see Table 4.3.2.6-25), representing an increase of 6.2 percent over the baseline for the Texas/New Mexico deployment region. This contrasts with a peak requirement of some 270 personnel for the Proposed Action in Nevada/Utah which represents a 2.3 percent increase over the Nevada/Utah baseline. Likewise, the long term requirements of M-X are somewhat greater in Texas/New Mexico than in Nevada/Utah under the Proposed Action. For example, 49 personnel are needed on the long-term versus only 15 for Nevada/Utah. The anticipated need for temporary personnel, although insignificant, is larger, 5 percent, in Texas/New Mexico, than the expected 2 percent in Nevada/Utah.

Among the permanently affected counties are Hartley, Dallam, Moore and Potter/Randall counties in Texas and Curry and Roosevelt counties in New Mexico. Of the Texas counties, only two, Hartley and Dallam counties, are significantly impacted. The peak-year requirements in Hartley County, location of the second operating base, total some 32 doctors, nurses, dentists and mental health personnel, or about 119 percent over baseline. Its long term needs total only 4 personnel, thus leading to an anticipated need for temporary personnel of 48 percent of baseline in the peak year, which will be a disruptive factor in the provision of adequate health services. Similarly, Dallam County has a peak-year requirement of 38 personnel, or 83 percent over baseline, but a long term need for only 5. The expected need for temporary personnel would amount to 39 percent of the baseline requirements.

In New Mexico, Curry County is the only county that would be significantly impacted. Its peak-year requirements come to 102 personnel, some 34 percent over baseline whereas its long term needs are projected at 18 health personnel. This is likely to create a need for temporary personnel of some 21 percent of baseline during the peak years.

The counties that are projected to experience only short-lived M-X related requirements and that can expect to be significantly impacted are Sherman in Texas and Harding in New Mexico. Sherman County's anticipated need for temporary personnel in the peak years will be about 14 percent of baseline, but Harding County's will be more. For Harding County, in the peak-year, M-X will require only 11 health personnel, some 157 percent over baseline, but since none are needed in the long term, the need for temporary personnel is anticipated to be of the order of 61 percent, large enough to place considerable strains, although short-lived, on the provision of health services in Harding County.

Table 4.3.2.6-25. (page 1 of 3)

TEXAS/NEW MEXICO HEALTH SERVICES PERSONNEL REQUIREMENTS					
DEPLOYMENT REGION			BAILEY COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM	ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)			M-X INDUCED CHANGE (% above normal growth baseline)	
7	306	(6.2)	49	(0.9)	0 (0)
8	159	(3.2)	22	(0.4)	0 (0)
CASTRO COUNTY, TX.			COCHRAN COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM	ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)			M-X INDUCED CHANGE (% above normal growth baseline)	
7	1	(1.4)	0	(0)	0 (0)
8	1	(1.4)	0	(0)	0 (0)
DALE COUNTY, TX.			DEAF SMITH, COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM	ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)			M-X INDUCED CHANGE (% above normal growth baseline)	
7	38	(82.6)	5	(9.6)	0 (0)
8	6	(13.0)	0	(0.0)	0 (0)
HALE COUNTY, TX.			HARTLEY COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM	ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)			M-X INDUCED CHANGE (% above normal growth baseline)	
7	1	(0.4)	0	(0)	4 (13.8)
8	0	(0.0)	0	(0)	0 (0.0)

Table 4.3.2.6-25. (page 2 of 3)

TEXAS/NEW MEXICO HEALTH SERVICES PERSONNEL REQUIREMENTS					
HOCKLEY COUNTY, TX.			LAMB COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM	ALTER-NATIVE	PEAK YEAR	LONG TERM
M-X INDUCED CHANGE (% above normal growth baseline)					
7	1 (0.7)	0 (0)	7	0 (0)	0 (0)
8	0 (0.0)	0 (0)	8	0 (0)	0 (0)
LUBBOCK COUNTY, TX.			MOORE COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM	ALTER-NATIVE	PEAK YEAR	LONG TERM
M-X INDUCED CHANGE (% above normal growth baseline)					
7	34 (2.1)	0 (0)	7	14 (14)	5 (4.8)
8	24 (1.5)	0 (0)	8	0 (0)	0 (0.0)
OLDHAM COUNTY, TX.			PARMER COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM	ALTER-NATIVE	PEAK YEAR	LONG TERM
M-X INDUCED CHANGE (% above normal growth baseline)					
7	0 (0)	0 (0)	7	5 (7.4)	0 (0)
8	0 (0)	0 (0)	8	0 (0)	0 (0)
POTTER/RANDALL COUNTIES, TX.			SHERMAN COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM	ALTER-NATIVE	PEAK YEAR	LONG TERM
M-X INDUCED CHANGE (% above normal growth baseline)					
7	74 (6.1)	13 (1.0)	7	4 (16.0)	0 (0)
8	23 (1.9)	1 (0.1)	8	0 (0.0)	0 (0)

3746

Table 4.3.2.6-25. (page 3 of 3)

TEXAS/NEW MEXICO HEALTH SERVICES PERSONNEL REQUIREMENTS					
SWISHER COUNTY, TX.			CHAVES COUNTY, NM.		
ALTER- NATIVE	PEAK YEAR	LONG TERM	ALTER- NATIVE	PEAK YEAR	LONG TERM
	H-X INDUCED CHANGE (% above normal growth baseline)			H-X INDUCED CHANGE (% above normal growth baseline)	
7	0 (0)	0 (0)	7	13 (3.4)	0 (0)
	0 (0)	0 (0)		9 (2.3)	0 (0)
CURRY COUNTY, NM.			DE BACA COUNTY, NM.		
ALTER- NATIVE	PEAK YEAR	LONG TERM	ALTER- NATIVE	PEAK YEAR	LONG TERM
	H-X INDUCED CHANGE (% above normal growth baseline)			H-X INDUCED CHANGE (% above normal growth baseline)	
7	102 (34.1)	18 (6.0)	7	0 (0)	0 (0)
	88 (29.4)	17 (5.7)		0 (0)	0 (0)
HARDING COUNTY, NM.			QUAY COUNTY, NM.		
ALTER- NATIVE	PEAK YEAR	LONG TERM	ALTER- NATIVE	PEAK YEAR	LONG TERM
	H-X INDUCED CHANGE (% above normal growth baseline)			H-X INDUCED CHANGE (% above normal growth baseline)	
7	11 (157.1)	0 (0)	7	9 (12.2)	0 (0)
	9 (128.6)	0 (0)		9 (12.2)	0 (0)
ROOSEVELT COUNTY, NM.			UNION COUNTY, NM.		
ALTER- NATIVE	PEAK YEAR	LONG TERM	ALTER- NATIVE	PEAK YEAR	LONG TERM
	H-X INDUCED CHANGE (% above normal growth baseline)			H-X INDUCED CHANGE (% above normal growth baseline)	
7	15 (13.4)	4 (3.4)	7	0 (0)	0 (0)
	12 (10.7)	4 (3.4)		0 (0)	0 (0)

3746

ALTERNATIVE 8 (4.3.2.6.2.10)

In Alternative 8, the DDA facilities are split between Nevada/Utah and Texas/New Mexico, with only one operating base in the Nevada/Utah region. Consequently, the Nevada/Utah deployment regions' peak-year health services personnel requirements are only 36 percent of those of full deployment in Nevada/Utah, with no M-X related personnel requirements in the long run, compared to 15 under the Proposed Action. As a result of the split deployment and the smaller number of in-migrants, the health services personnel needs are much lower. For example, peak-year requirements are only 61, 67, and 50 percent of the Proposed Action needs in Clark, Lincoln and Nye counties in Nevada, and only 13, and 17 percent in Beaver and Iron Counties in Utah. Moreover, Eureka, White Pine, Juab, Salt Lake and Washington Counties now have no requirements. Only Lincoln can anticipate a need for temporary personnel, 18 percent of the baseline in the peak year. This is not significantly different from that which is expected to occur under the Proposed Action. Only when other projects are included does another county, Juab, appear to experience a need for temporary personnel in the peak years. In Texas/New Mexico, under split deployment, peak year health services personnel requirements reach 159, representing a 2.7 percent increase over baseline requirements in the same year. This is 52 percent of the full deployment peak-year requirements in Texas/New Mexico. As with the split deployment alternative in Nevada/Utah, the peak years and long term health personnel requirement are reduced substantially. As a result three counties can anticipate any significant burden on, or dislocation of health services. These are, in order of relative impact, Harding and Curry counties in New Mexico, and Hartley County in Texas. Harding County's peak-year health services requirements call for 9 health personnel, but since these are needed for a few peak years, and as 7 are projected for the normal growth baseline needs, Harding County can anticipate a need for temporary personnel equal to 56 percent of the baseline during peak years. Curry County could require 88 health personnel in the peak-year, 29 percent above baseline, but declining to 17 in the long term. The need for temporary personnel would be 18 percent of baseline, a fairly large figure when the numbers of people involved is quite high. Hartley County in Texas is the only other county to be impacted with a need for temporary personnel of 16 percent of baseline.

PUBLIC SAFETY CONSIDERATIONS

INTRODUCTION (4.3.2.6.3.1)

Rapid population growth causes strains and pressures on rural police and fire services. In many rural areas, the fire protection force is composed of volunteers. With the influx of a large population, the volunteer force may find it difficult to provide adequate fire protection, particularly for scattered mobile homes and large commercial buildings. Much of the new population will probably come from urban areas and bring their urban values and interpretations of law and order to rural communities. The rapid growth could be accompanied by an increase in crime rates. Thus, the problems of crowded facilities and of attracting and keeping enough qualified people to serve as deputies and police officers will be important.

Law enforcement personnel requirements are assumed to be generated by the total population, whether resident in local communities, the operating base, or in construction camps since any of these persons could be the perpetrator or victim of crime in the area. The requirements are further assumed to be invariant for all population categories, with a parameter value of 2.0 police officers per thousand. This assumption tends to overestimate the total impact since police personnel will be part of the operating base complex. As there is no reasonable way to treat base populations different from other population groups, this conservative approach has been taken. Construction costs for law enforcement facilities such as police stations and detention centers is also a function of population, with a cost of \$48 per person estimated (1978 dollars).

The additional personnel needs associated with fire safety services are estimated in a manner similar to that for law enforcement except that only the population resident in local communities is used to generate estimates. It is assumed that persons and property on the base will be provided fire protection services by the base, while the population in temporary construction camps are provided fire safety services by contractors. The personnel needs ratio is invariant for all population groups (1.65 fire personnel per 1,000 population) assumed residing in local communities.

Public Safety Considerations--Proposed Action

It is assumed that sufficient public safety personnel would be attracted to a given area to meet the long term permanent public safety needs of the population in the area. These personnel are generally fewer than those required to meet the needs of the peak year population. The difference between the long term needs and the peak year needs must be filled with temporary public safety personnel, or left unfilled.

Required temporary public safety personnel are compared to the projected personnel requirements in the peak year, including M-X induced needs plus the base line needs to estimate the significance of impact. If the temporary public safety personnel needs exceed the M-X induced base line needs by 15 percent or more, the impact is considered to be significant.

PROPOSED ACTION (4.3.2.6.3.2)

Since the local and regional labor markets are not sufficiently large to provide the necessary labor, the balance must be met by in-migration. These in-migrants and their families will place additional demand on the public safety sector, necessitating the recruitment of more public safety personnel.

Table 4.3.2.6-26 presents for each county, the M-X induced peak year and long-term public safety personnel requirements and percent change over normal growth baseline, by alternative. The lower half of the tables include an analysis of M-X plus other construction projects proposed for the deployment region. At the regional level, M-X-induced public safety personnel requirements will peak in 1987, with a need for 259 additional personnel, representing a 4.2 percent increase over the baseline projection. The regional cumulative impact of M-X and other projects totals 369 in peak year 1987, a 6.0 percent increase over the baseline. The long-term M-X requirements are for 73 personnel, or 1.0 percent more than baseline needs in 1994. Other projects increase the long-term requirements to 144 personnel, 2 percent more than baseline. It is assumed that only the long-term personnel requirements will be met by permanent personnel, it is likely that there will be a need for temporary public safety personnel of 186 personnel in the peak year. This represents 2.9 percent of the total personnel projected to be required during peak year. At the regional level, the need for temporary public safety personnel is not expected to be significant.

Assuming full deployment in Nevada/Utah under the Proposed Action, continuous and high project requirements for public safety services will occur primarily within the jurisdiction of Clark County and Beaver County where the first and second operating bases will be located, respectively. Clark County's peak year requirements total some 85 personnel, or 4.2 percent more than the peak year baseline requirements. Other projects bring the cumulative peak total to 90 personnel, which represents a 4.4 percent increase over baseline. M-X is projected to require 36 personnel in the long-term, and including other projects, 39 personnel. Although the need for temporary public safety personnel can be expected to be large absolutely, in relative terms it is not significant. Beaver County, Utah, however, will experience significant impacts from M-X which will be compounded by other projects. Beaver County's peak personnel requirements total 50, 277.8 percent over baseline, while other projects bring the cumulative figure to 67 personnel, or

Table 4.3.2.6-26. (page 1 of 3)

**NEVADA/UTAH
PUBLIC SAFETY PERSONNEL REQUIREMENTS**

DEPLOYMENT REGION		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
PROP. ACTION	259 (4.2)	73 (1.0)
1	257 (4.2)	72 (1.0)
2	256 (4.1)	72 (1.0)
3	254 (4.1)	85 (1.2)
4	249 (4.0)	79 (1.1)
5	254 (4.1)	85 (1.2)
6	250 (4.0)	78 (1.1)
8 A	105 (1.7)	36 (0.5)
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)	
PROP. ACTION	369 (6.0)	144 (2.0)
1	367 (5.3)	143 (2.0)
2	362 (5.9)	143 (2.0)
3	340 (5.3)	155 (2.2)
4	359 (5.8)	149 (2.1)
5	364 (5.9)	156 (2.2)
6	360 (5.9)	149 (2.1)
8 A	219 (3.6)	107 (1.5)

CLARK COUNTY, NV.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
PROP. ACTION	85 (4.2)	36 (1.4)
1	85 (4.2)	36 (1.4)
2	83 (4.1)	36 (1.4)
3	2 (0.1)	0 (0.0)
4	56 (2.7)	28 (1.1)
5	1 (0.0)	0 (0.0)
6	56 (2.7)	28 (1.1)
8 A	61 (3.0)	36 (1.4)
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)	
PROP. ACTION	90 (4.4)	39 (1.6)
1	90 (4.4)	39 (1.6)
2	88 (4.3)	39 (1.6)
3	6 (0.2)	3 (0.0)
4	60 (2.9)	31 (1.2)
5	6 (0.2)	3 (0.0)
6	60 (2.9)	31 (1.2)
8 A	66 (3.2)	37 (1.5)

EUREKA COUNTY, NV.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
PROP. ACTION	22 (550.0)	0 (0.0)
1	22 (550.0)	0 (0.0)
2	22 (550.0)	0 (0.0)
3	22 (550.0)	0 (0.0)
4	22 (550.0)	0 (0.0)
5	22 (550.0)	0 (0.0)
6	22 (550.0)	0 (0.0)
8 A	0 (0.0)	0 (0.0)
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)	
PROP. ACTION	22 (550.0)	0 (0.0)
1	22 (550.0)	0 (0.0)
2	22 (550.0)	0 (0.0)
3	22 (550.0)	0 (0.0)
4	22 (550.0)	0 (0.0)
5	22 (550.0)	0 (0.0)
6	22 (550.0)	0 (0.0)
8 A	0 (0.0)	0 (0.0)

LINCOLN COUNTY, NV.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
PROP. ACTION	14 (100.0)	0 (0.0)
1	14 (100.0)	0 (0.0)
2	14 (100.0)	0 (0.0)
3	14 (100.0)	0 (0.0)
4	14 (100.0)	0 (0.0)
5	14 (100.0)	0 (0.0)
6	14 (100.0)	0 (0.0)
8 A	11 (78.6)	0 (0.0)
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)	
PROP. ACTION	14 (100.0)	0 (0.0)
1	14 (100.0)	1 (6.3)
2	14 (100.0)	0 (0.0)
3	14 (100.0)	0 (0.0)
4	14 (100.0)	1 (6.3)
5	14 (100.0)	0 (0.0)
6	14 (100.0)	0 (0.0)
8 A	11 (78.6)	0 (0.0)

Table 4.3.2.6-26. (page 2 of 3)

NEVADA/UTAH PUBLIC SAFETY PERSONNEL REQUIREMENTS		
NYE COUNTY, NV.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
PROP. ACTION	33 (-82.5)	0 (0.0)
1	33 (-82.5)	0 (0.0)
2	33 (-82.5)	0 (0.0)
3	33 (-82.5)	0 (0.0)
4	33 (-82.5)	0 (0.0)
5	33 (-82.5)	0 (0.0)
6	33 (-82.5)	0 (0.0)
8A	18 (-45.0)	0 (0.0)
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)	
PROP. ACTION	33 (-82.5)	0 (0.0)
1	33 (-82.5)	0 (0.0)
2	33 (-82.5)	0 (0.0)
3	33 (-82.5)	0 (0.0)
4	33 (-82.5)	0 (0.0)
5	33 (-82.5)	0 (0.0)
6	33 (-82.5)	0 (0.0)
8A	18 (-45.0)	0 (0.0)

WHITE PINE COUNTY, NV.		
ALTER-NATIVE		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
PROP. ACTION	21 (67.7)	0 (0.0)
1	21 (67.7)	0 (0.0)
2	21 (67.7)	0 (0.0)
3	66 (213.0)	25 (69.4)
4	21 (67.7)	0 (0.0)
5	66 (213.0)	35 (97.2)
6	21 (67.7)	0 (0.0)
8A	9 (-2.0)	0 (0.0)
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)	
PROP. ACTION	43 (138.7)	18 (50.0)
1	23 (74.2)	18 (50.0)
2	43 (138.7)	18 (50.0)
3	93 (300.0)	53 (147.2)
4	43 (138.7)	18 (50.0)
5	93 (300.0)	53 (147.2)
6	43 (138.7)	18 (50.0)
8A	22 (71.0)	18 (50.0)

BEAVER COUNTY, UT.		
ALTER-NATIVE		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
PROP. ACTION	50 (277.8)	33 (165.0)
1	11 (-61.1)	2 (-10.0)
2	11 (-61.1)	0 (0.0)
3	14 (-77.8)	4 (-2.0)
4	14 (-77.8)	4 (-2.0)
5	70 (388.9)	43 (215.0)
6	70 (388.9)	43 (215.0)
8A	12 (-66.7)	0 (0.0)
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)	
PROP. ACTION	67 (372.2)	51 (255.0)
1	35 (194.4)	20 (100.0)
2	35 (194.4)	18 (-90.0)
3	37 (205.5)	21 (105.0)
4	37 (205.5)	21 (105.0)
5	94 (522.2)	51 (255.0)
6	94 (522.2)	61 (305.0)
8A	30 (166.0)	18 (-90.0)

IRON COUNTY, UT.		
ALTER-NATIVE		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
PROP. ACTION	7 (-8.9)	4 (-4.5)
1	50 (63.3)	31 (34.8)
2	0 (0.0)	0 (0.0)
3	63 (84.0)	42 (47.2)
4	63 (84.0)	42 (47.2)
5	9 (12.0)	7 (-7.8)
6	9 (12.0)	7 (-7.8)
8A	0 (0.0)	0 (0.0)
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)	
PROP. ACTION	7 (-8.9)	4 (-4.5)
1	50 (63.3)	31 (34.8)
2	0 (0.0)	0 (0.0)
3	64 (85.3)	42 (47.2)
4	64 (85.3)	42 (47.2)
5	10 (13.3)	7 (-7.9)
6	10 (13.3)	7 (-7.9)
8A	1 (-1.3)	0 (0.0)

Table 4.3.2.6-26. (page 3 of 3)

NEVADA/UTAH PUBLIC SAFETY PERSONNEL REQUIREMENTS		
JUAB COUNTY, UT.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
PROP. ACTION		
1	16 (-64.0)	0 (0.0)
2	16 (-64.0)	0 (0.0)
3	18 (-72.0)	2 (6.9)
4	16 (-64.0)	0 (0.0)
5	16 (-64.0)	0 (0.0)
6	16 (-64.0)	0 (0.0)
8A	0 (0.0)	0 (0.0)
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)	
PROP. ACTION		
1	24 (96.0)	2 (6.9)
2	24 (96.0)	2 (6.9)
3	26 (104.0)	4 (13.8)
4	24 (96.0)	2 (6.9)
5	28 (112.0)	2 (6.9)
6	24 (96.0)	2 (6.9)
8A	8 (32.0)	2 (6.9)

MILLARD COUNTY, UT.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
PROP. ACTION		
1	19 (45.2)	0 (0.0)
2	19 (45.2)	0 (0.0)
3	71 (169.0)	34 (75.6)
4	19 (45.2)	0 (0.0)
5	19 (45.2)	0 (0.0)
6	19 (45.2)	0 (0.0)
8A	20 (50.0)	0 (0.0)
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)	
PROP. ACTION		
1	43 (102.2)	11 (-24.2)
2	42 (100.0)	11 (-24.2)
3	94 (223.8)	45 (100.0)
4	42 (100.0)	11 (-24.4)
5	43 (102.4)	11 (-24.4)
6	43 (102.4)	11 (-24.4)
8A	46 (115.0)	11 (-24.4)

UTAH/SALT LAKE COUNTY, UT.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
PROP. ACTION		
1	33 (-0.3)	0 (0.0)
2	33 (-0.3)	0 (0.0)
3	36 (-1.0)	0 (0.0)
4	37 (-1.0)	0 (0.0)
5	34 (-1.0)	0 (0.0)
6	38 (-1.0)	0 (0.0)
8	35 (-1.0)	0 (0.0)
0 (0.0)	0 (0.0)	0 (0.0)
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)	
PROP. ACTION		
1	60 (1.6)	19 (0.5)
2	60 (1.6)	19 (0.5)
3	61 (1.6)	19 (0.5)
4	64 (1.7)	19 (0.5)
5	61 (1.6)	19 (0.5)
6	65 (1.7)	19 (0.5)
8A	62 (1.7)	19 (0.5)
27 (0.7)	19 (0.5)	19 (0.5)

WASHINGTON COUNTY, UT.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	M-X INDUCED CHANGE (% above normal growth baseline)	
PROP. ACTION		
1	2 (1.9)	0 (0.0)
2	4 (3.8)	2 (1.6)
3	0 (0.0)	0 (0.0)
4	5 (4.8)	4 (3.3)
5	5 (4.8)	4 (3.3)
6	2 (1.9)	0 (0.0)
8A	2 (1.9)	0 (0.0)
0 (0.0)	0 (0.0)	0 (0.0)
ALTER-NATIVE	M-X PLUS OTHER PROJECTS (% above normal growth baseline)	
PROP. ACTION		
1	2 (1.9)	0 (0.0)
2	4 (3.8)	2 (1.6)
3	0 (0.0)	0 (0.0)
4	5 (4.8)	4 (3.3)
5	5 (4.8)	4 (3.3)
6	2 (1.9)	0 (0.0)
8A	2 (1.9)	0 (0.0)
0 (0.0)	0 (0.0)	0 (0.0)

Public Safety Considerations--Alternative 1

372.2 percent over the normal growth baseline. After the peak year, as construction activity decreases, the public safety personnel requirements fall off to reach a permanent long-term requirement for 33 personnel, 165 percent over baseline, and other projects will increase the number to 51, or 255 percent over baseline. A need for 17 temporary public safety personnel which is 25 percent of the long term baseline, can be expected. Other projects would decrease the need to 18.8 percent which is still a significant impact that will likely place burdens on the existing public safety system during peak years. Iron County in Utah is projected to experience long-term spillover effects from the base at Milford, however, the impacts are expected to be minimal, requirements being only 4.5 percent above baseline in the long-term.

All other counties in the deployment region are projected to experience only short-lived M-X related public safety personnel requirements, however, these are often extreme and likely to have significant impacts in a number of counties. Counties in which peak year impact requirements represent an especially large percent increase over normal growth baseline include Eureka (550 percent) and Lincoln (100 percent). Eureka County will require a total of 22 additional public safety personnel in the peak year 1988, and is likely to experience a need of 85 percent of the peak year baseline since no personnel are required in the long-term. Other significantly impacted counties will be White Pine, Nye, Juab, and Millard with needs for temporary public safety personnel of 68 percent, 45 percent, 39 percent and 31 percent, respectively. The remaining counties, Washington and Salt Lake, while having peak-year personnel needs, are not significantly impacted.

Potential mitigation strategies for this impact include prepaid property taxes for use in financing additional service, a state community development authority to finance public services, and provision of federal law enforcement and planning grants. The problems of overloading police and fire services can be at least partially solved, as with other public service and facility problems, through additional funding to expand the services. However, this additional funding is most useful when expansion of the service has been carefully planned in time to meet peak demand.

ALTERNATIVE 1 (4.3.2.6.3.3)

Under this alternative, the DDA facilities and the first operating base remain the same as under the Proposed Action, with the first operating base at Coyote Spring Valley and the second moved from Milford to Beryl in Iron County, Utah. There are no significant differences between the Proposed Action and Alternative 1 at the regional level. The only significant differences occur at the individual county level, in Beaver and Iron counties in Utah. With the second operating base no longer in Beaver County, its M-X related peak year public safety personnel requirements fall to only 11 which is still a significant increase over baseline requirements (61.1 percent). Long-term needs are reduced to only two personnel. As a result, the need for temporary public safety personnel is estimated at 31 percent of the baseline in the peak year. Long-term cumulative requirements of M-X plus other projects remain at a high percent over baseline, 100 percent, due to population spillover effects from Iron County.

Public safety personnel requirements are in general six times greater in Iron County under Alternative 1 than the Proposed Action, due to the presence of the

Public Safety Considerations--Alternatives 1, 2, 3

operating base in Iron County. In this case, 50 additional personnel will be required to meet peak year demands (63.3 percent increase over baseline) and 31 personnel will be needed over the long-term. The resultant number of temporary public safety personnel that can be anticipated will be about 15 percent of baseline for the peak year, a figure that is reduced slightly when other projects are included. Even so, a need for temporary personnel of this size may present public safety service delivery problems during the peak construction period.

ALTERNATIVE 2 (4.3.2.6.3.4)

Under Alternative 2, with full deployment in Nevada/Utah, the first operation base is located at Coyote Spring (Clark County, Nevada) with the second operating base near Delta (Millard County, Utah). The impacts at the regional level are virtually identical to those under the Proposed Action. Impact in Clark County is essentially identical to that experienced under the Proposed Action with an M-X induced requirement of public safety personnel of 83 (4.1 percent of baseline needs) in the peak year of 1986 and 36 (1.4 percent) permanent, long-term personnel. The need for 47 temporary public safety personnel equals 2.2 percent of the baseline. The number of personnel required in Millard County is substantially above the level experienced under the Proposed Action: 71 vs. 19 at the peak and 34 vs. 0 in the long-term. These represent 169 percent vs. 45 percent and 75 percent vs. 0 percent above respective baseline levels. The absolute need for temporary public safety personnel is 37 under Alternative 2 and 19 under the Proposed Action, yet the relative magnitude of this deficit varies little between actions: 33 percent and 31 percent, respectively.

There is spillover effect in only one county: Juab. Here, however, the impact is only slightly less than that experienced under the Proposed Action with a need for 16 temporary public safety personnel. All other county impacts are directly attributable to the construction of protective shelters and are short-lived but severe in some locations. These impacts are as follows for selected counties: Eureka (22 additional personnel, 550 percent above peak year baseline, need for 22 temporary personnel and 85 percent deficit), and White Pine (22 persons, 67 percent above peak year baseline, need for 21 temporary personnel and 68 percent deficit). Iron and Washington Counties in southwestern Utah experience no impact at all.

ALTERNATIVE 3 (4.3.2.6.3.5)

With Alternative 3 the first operating base is located at Beryl in Iron County, Utah and the second operating base at Ely in White Pine County, Nevada. At the deployment region' level impacts are essentially identical to those under the Proposed Action, with the addition of 254 public safety personnel in the peak year of 1987 (259 under the Proposed Action) and 85 persons in the long-term (73 under the Proposed Action).

With the removal of the base from Clark County, Nevada, the impacts incurred here fall almost to zero (two peak year jobs). In Iron County, on the other hand, the additional requirement in the peak year (1986) amounts to 63 public safety personnel as compared with seven under the Proposed Action. The percentage difference over baseline is 84 percent for Alternative 3 vs. 8.9 percent for the Proposed Action. In the long-term the difference is equally significant: 42 vs. 4 positions and 47 percent vs. 4.5 percent for Alternative 3 and Proposed Action,

Public Safety Considerations--Alternatives 3, 4, 5

respectively. There is a need for 21 temporary public safety personnel which amount to 15 percent of the peak year baseline.

In White Pine County, the location of the second operating base, the impact is more substantial, both absolutely and relatively. The absolute number of additional public safety personnel required at peak year for Alternative 3 is 66 (213 percent above baseline) compared to 21 (68 percent above baseline) for the Proposed Action. In the long term the corresponding figures are 25 (69 percent) and 0 (0.0 percent). The absolute need for temporary public safety personnel is 41 jobs which represents 42 percent of the baseline for the peak year.

Spillover effects occur in Beaver and Washington counties, Utah, both of which are adjacent to Iron County. The effects in Beaver County are less than under the Proposed Action: 14 vs. 50 additional personnel required in the peak year and 4 vs. 33 in the long-term. The effects in Washington County are larger than under the Proposed Action although they are relatively insignificant.

All other counties experience only short-term effects and these effects are identical to those experienced under the Proposed Action.

ALTERNATIVE 4 (4.3.2.6.3.6)

Alternative 4 calls for the first operating base to be located near Beryl in Iron County, Utah and the second operating base at Coyote Spring in Clark County, Nevada. As with Alternatives 1 through 6 the regional level impacts are identical to those under the Proposed Action.

For Iron County the impacts are identical to those experienced under Alternative 3 and will not be repeated here (see Alternative 3). For Clark County the impact is less than that of the Proposed Action (where it is the location of the first operating base): 56 vs. 85 additional persons in the peak year for Alternative 4 and the Proposed Action, respectively and 28 vs. 36 in the long-term, respectively. The percentage change above baseline is very small: 2.7 percent in the peak and 1.1 percent in the long-term.

There are long-term impacts in Beaver and Washington counties which are identical to those experienced under Alternative 3. The impacts on all other counties are identical with those of all previous alternatives and the Proposed Action.

ALTERNATIVE 5 (4.3.2.6.3.7)

The first operating base under Alternative 5 is located near Milford in Beaver County, Utah with the second operating base near Ely in White Pine County, Nevada.

For the deployment region as a whole the impacts are essentially identical to those of the Proposed Action. For Beaver County, the impacts call for an additional requirement of 70 public safety personnel in the peak year (1986) which is 389 percent above that year's baseline. This number is 40 percent greater than the corresponding figure to the Proposed Action. In the long run the additional requirements number 43 (215 percent above baseline) which is 30 percent above the

Public Safety Considerations--Alternatives 5, 6, 7

requirement under the Proposed Action. There is a need for 27 temporary public service personnel which is 31 percent of the M-X induced peak year baseline. Such impacts will cause severe public safety personnel problems unless they are anticipated and adequately planned for.

The impacts in White Pine County are significant: 66 additional persons in the peak year (213 percent above baseline) and 35 (97 percent above baseline) over the long-term. This level of impact is greater than for any other alternative and the Proposed Action. Such impact levels require substantial planning to alleviate service disruptions.

There are spillover effects in both Iron and Washington counties, Utah but they are small in absolute and relative magnitude. All other counties experience short-term effects identical to those under other Alternatives and the Proposed Action.

ALTERNATIVE 6 (4.3.2.6.3.8)

Under Alternative 6, the DDA facilities remain the same as under the Proposed Action. As a result at the regional level there are no significant differences between Alternative 6 and the Proposed Action. The first operating base has been switched from Coyote Spring to Milford and the second operating base from Milford to Coyote Spring. Thus, requirements are reduced in Clark County and increased in Beaver County and Iron County. Clark County will need only 66 percent of the peak year public safety personnel it would need under the Proposed Action, an insignificant requirement in either case. Beaver County's peak year requirements are 4 percent higher than those under the Proposed Action. However, the anticipated need for temporary public safety employees is actually less in absolute terms, 9, compared to 17 personnel under the Proposed Action. Iron County's peak year requirements have increased by two from seven to nine personnel, a 12 percent increase over baseline.

ALTERNATIVE 7 (4.3.2.6.3.9)

Under Alternative 7, the decision to deploy the M-X system in Texas/New Mexico with bases near Clovis in Curry County, New Mexico and Dalhart in Hartley County, Texas creates large impacts in terms of public safety personnel and infrastructural requirements. In all affected counties, there occurs a year in which public safety requirements will peak after which they will decrease to a long-term level (above that of the projected baseline level), or to zero. The difference between peak and long-term requirements varies with the location of a base vs. protective structures only.

For the Texas/New Mexico deployment region as a whole, public safety personnel requirements total 281 (see Table 4.3.2.6-27) in the peak year of 1987 which represents an increase of 10.6 percent over the normal growth baseline. This compares with an additional requirement of 259 persons for the Proposed Action in Nevada/Utah which represented only a 4.2 percent increase over normal growth baseline. The absolute requirement for Alternative 7 is thus 8.5 percent higher than for the Proposed Action. With regard to the long-term personnel requirements, they number 94 (3.3 percent above normal projected baseline). For the Proposed Action in Nevada/Utah the corresponding figures are 73 and 1 percent. The Alternative 7 requirement level is some 28 percent above the Proposed Action level. The need for temporary public safety personnel is also more severe, although not significant, in Texas/New Mexico under this alternative than under the Proposed Action in Nevada/Utah: 6.4 percent vs. 2.9 percent.

Table 4.3.2.6-27. (page 1 of 3)

TEXAS/NEW MEXICO PUBLIC SAFETY PERSONNEL REQUIREMENTS		
DEPLOYMENT REGION		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	H-X INDUCED CHANGE (% above normal growth baseline)	
7	281 (10.6)	94 (3.3)
8	156 (5.9)	48 (1.7)

BAILEY COUNTY, TX.		
CASTRO COUNTY, TX.		
COCHRAN COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	H-X INDUCED CHANGE (% above normal growth baseline)	
7	8 (27.6)	0 (0.0)
8	1 (-3.4)	0 (0.0)

DALE COUNTY, TX.		
DEAF SMITH COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	H-X INDUCED CHANGE (% above normal growth baseline)	
7	39 (150.0)	5 (17.9)
8	11 (-42.3)	0 (0.0)

HALE COUNTY, TX.		
HARTLEY COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
	H-X INDUCED CHANGE (% above normal growth baseline)	
7	2 (1.4)	0 (0.0)
8	0 (0.0)	0 (0.0)

Table 4.3.2.6-27. (page 2 of 3)

TEXAS/NEW MEXICO

PUBLIC SAFETY PERSONNEL REQUIREMENTS

HOCKLEY COUNTY, TX.		
	PEAK YEAR	LONG TERM
ALTER-NATIVE M-X INDUCED CHANGE (% above normal growth baseline)		
7	1 (-1.3)	0 (0.0)
8	0 (0.0)	0 (0.0)

LAMB COUNTY, TX.		
	PEAK YEAR	LONG TERM
ALTER-NATIVE M-X INDUCED CHANGE (% above normal growth baseline)		
7	0 (0.0)	0 (0.0)
8	0 (0.0)	0 (0.0)

LUBBOCK COUNTY, TX.		
	PEAK YEAR	LONG TERM
ALTER-NATIVE M-X INDUCED CHANGE (% above normal growth baseline)		
7	20 (2.3)	0 (0.0)
8	13 (1.5)	0 (0.0)

MOORE COUNTY, TX.		
	PEAK YEAR	LONG TERM
ALTER-NATIVE M-X INDUCED CHANGE (% above normal growth baseline)		
7	11 (20.3)	5 (8.9)
8	0 (0.0)	0 (0.0)

OLDHAM COUNTY, TX.		
	PEAK YEAR	LONG TERM
ALTER-NATIVE M-X INDUCED CHANGE (% above normal growth baseline)		
7	0 (0.0)	0 (0.0)
8	0 (0.0)	0 (0.0)

PARMER COUNTY, TX.		
	PEAK YEAR	LONG TERM
ALTER-NATIVE M-X INDUCED CHANGE (% above normal growth baseline)		
7	10 (27.0)	0 (0.0)
8	0 (0.0)	0 (0.0)

POTTER/RANDALL COUNTIES, TX.		
	PEAK YEAR	LONG TERM
ALTER-NATIVE M-X INDUCED CHANGE (% above normal growth baseline)		
7	53 (8.2)	9 (1.3)
8	13 (2.0)	0 (0.0)

SHERMAN COUNTY, TX.		
	PEAK YEAR	LONG TERM
ALTER-NATIVE M-X INDUCED CHANGE (% above normal growth baseline)		
7	2 (15.4)	0 (0.0)
8	0 (0.0)	0 (0.0)

Table 4.3.2.6-27. (page 3 of 3)

TEXAS/NEW MEXICO PUBLIC SAFETY PERSONNEL REQUIREMENTS		
SWISHER COUNTY, TX.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
M-X INDUCED CHANGE (% above normal growth baseline)		
7	0 (0.0)	0 (0.0)
8	0 (0.0)	0 (0.0)
CHAVES COUNTY, NM.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
M-X INDUCED CHANGE (% above normal growth baseline)		
7	17 (8.3)	0 (0.0)
8	15 (7.0)	0 (0.0)
CURRY COUNTY, NM.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
M-X INDUCED CHANGE (% above normal growth baseline)		
7	80 (49.7)	47 (29.4)
8	74 (46.0)	48 (28.8)
DE BACA COUNTY, NM.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
M-X INDUCED CHANGE (% above normal growth baseline)		
7	0 (0.0)	0 (0.0)
8	0 (0.0)	0 (0.0)
HARDING COUNTY, NM.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
M-X INDUCED CHANGE (% above normal growth baseline)		
7	17 (850.0)	0 (0.0)
8	16 (850.0)	0 (0.0)
QUAY COUNTY, NM.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
M-X INDUCED CHANGE (% above normal growth baseline)		
7	17 (42.5)	0 (0.0)
8	14 (35.0)	0 (0.0)
ROOSEVELT COUNTY, NM.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
M-X INDUCED CHANGE (% above normal growth baseline)		
7	19 (30.6)	2 (3.2)
8	16 (26.7)	2 (3.2)
UNION COUNTY, NM.		
ALTER-NATIVE	PEAK YEAR	LONG TERM
M-X INDUCED CHANGE (% above normal growth baseline)		
7	0 (0.0)	0 (0.0)
8	0 (0.0)	0 (0.0)

Public Safety Considerations--Alternatives 7, 8

Among the permanently impacted counties under this alternative, i.e., those which incur long-term effects, five are in Texas (the base location counties of Dallam, Hartley, Moore, Potter and Randall) with two in New Mexico (Curry and Roosevelt). In New Mexico the greatest long-term impact occurs in Curry County where an additional 80 persons are required in the peak year of 1986 (almost 50 percent above baseline needs in that year) and where 47 additional personnel are required in the long-term (29 percent above baseline). The need for temporary public safety personnel is 13.7 percent and 21 percent, respectively, in Curry and Roosevelt counties. The long-term effect in Roosevelt County is attributable to spillover effect from Curry. Two other counties in New Mexico will experience significant impacts which will be of a temporary nature: Harding and Quay. The impact is due solely to protective structure construction activity and not base county spillover effect. Harding County has a peak year requirement induced by M-X activity of 17 public safety personnel which constitutes a need for temporary public safety personnel of 89 percent of the M-X-induced peak year baseline. Quay County has the same number of additional personnel required in the peak year which represents a need for temporary public safety personnel of 30 percent of the M-X peak year baseline. Advance planning in anticipation of such severe impacts will be necessary in both counties.

In Texas the counties of Dallam and Hartley experience peak year additional public safety personnel requirements of 39 (150 percent above baseline) and 40 (285 percent above baseline), respectively. Their respective long-term requirements are 5 and 26 which represent 17.9 percent and 162.5 percent over the appropriate year baseline levels. The need for 34 temporary personnel in Dallam equals 52 percent of the baseline and 14 in Hartley equals 25 percent of this baseline. Three other counties experience long-term effects due to spillover from the base counties: Moore, Potter, and Randall. Their need for temporary public safety personnel expressed absolute numbers of 6 and 44 (for Potter/Randall counties combined) or 9.2 percent and 6.3 percent of the M-X-induced peak year baseline.

Significant impacts occur in three additional counties, all of which are attributable to short-term construction activity. These counties are Bailey, Palmer, and Deaf Smith where the number of peak year public safety personnel required are 8, 10, and 15, respectively, which represent a need for temporary public service personnel equal to 22 percent, 21 percent, and 17 percent of the M-X-induced peak baseline, respectively.

ALTERNATIVE 8 (4.3.2.6.3.10)

This is a split-deployment alternative, with the DDA facilities split between Nevada/Utah and Texas/New Mexico, and bases located near Coyote Spring, Nevada and near Clovis, New Mexico. Consequently, the Nevada/Utah deployment region's peak year public safety personnel requirements are only 40 percent of those under the Proposed Action. Only 36 additional personnel will be required in the long term, compared to 73 under the Proposed Action.

As a result of the split deployment and the reduced number of in-migrants the public safety personnel needs will be much lower in most counties under this alternative. Clark County's (location of Coyote Spring base) peak year personnel requirements are 72 percent of those under the Proposed Action, although the long term impacts remain the same. Nye County's peak year needs are almost halved, and Beaver County's are reduced to 24 percent of those under the Proposed Action.

Public Safety Considerations--Alternative 8

Lincoln County's requirements are still 78 percent of those under the Proposed Action and Millard County's requirements remain about the same. In White Pine, Iron, Eureka, Juab, Salt Lake and Washington counties, peak year requirements are reduced to nothing, which is quite a substantial difference for some of the counties. Under this split deployment alternative the second operating base is located near Clovis in Curry County, New Mexico. In the peak year of 1987, this deployment alternative calls for an additional regional requirement of public safety personnel numbering 156 which is 55.5 percent of the requirements of the full deployment option in Texas/New Mexico (Alternative 7). The long-term regional personnel requirement is 48 as compared with 94 under full deployment. There is a need for 108 temporary public safety personnel under split deployment, only 37.7 percent the full deployment level.

In New Mexico the largest absolute personnel requirements (both in the peak year and long-term) occur in the base county (Curry County). In the peak year of 1986, 74 (46.0 percent) additional public safety personnel are required by the project with 48 (28.8 percent) in the peak year. This results in a need for 30 temporary public safety personnel which is equal to 13 percent of the M-X-induced peak year baseline. Larger relative shortfalls occur in other counties because of spillover effects (Roosevelt) and protective structure construction effects (Harding and Quay). The absolute numbers of required temporary personnel are 14, 16, and 14 in these counties, respectively, but the relative magnitude of these needs are substantial: 17.9 percent, 88.9 percent, and 25.9 percent, respectively.

In Texas the county effects are solely attributable to the construction of protective structures. The greatest relative impacts occur in Hartley and Dallam counties where the need for temporary public safety personnel is equal to 39 percent and 30 percent of the M-X-induced peak year baselines, respectively, although there are larger absolute impacts in Lubbock and Potter/Randall counties. Because of the higher baseline, however, in these last mentioned counties, the relative impact is small (ranging between 1.4 percent and 3.3 percent only).



Urban Land Use



URBAN LAND USE

INTRODUCTION (4.3.2.7.1)

Construction and operations of the M-X system would generate demand for additional land to be converted to various urban uses such as housing, commercial retail and commercial, industrial, public and institutional uses, and streets and highways, to accommodate the population forecast for local communities. These requirements which are projected as a function of changes in population size and composition, different economic variables such as personal income and expenditure patterns, and normative standards for certain facilities-are likely to tax the capabilities of the land development industry in the rural communities of the region and diminish the supply of private land available for future expansion. Furthermore, the "boom-bust" nature of the project-related growth results in long term requirements for additional urban land which are considerably less than during construction. The probability that a large share of the short-lived requirements would be met by lower quality temporary structures and facilities is likely to have significant short term implication for the quality of the residential environment in the most severely affected communities.

Urban land is analyzed for the Proposed Action and the alternatives in terms of additional amounts of land needed to accommodate the project-induced population growth relative to the amount of urban land available (vacant) and the amount of land currently developed for urban uses in each of the operating base counties. The land requirements are aggregated into a single figure for all urban land uses, including housing, schools, parks, retail businesses, offices, industry, and streets.

The best available figures are utilized concerning the amount of vacant and developed urban land in the incorporated and unincorporated communities of the counties. In some cases jurisdictions are in the process of updating master or comprehensive plans; when more current figures are available they will be utilized for the final EIS analysis. In some counties, acreages of urban land (vacant and developed) are available only for the incorporated cities. As a result, urban land in the unincorporated portions of the county, which in most cases is a minor portion of the total urban land, has not been accounted for. Table 4.3.2.7-1 provides data on current vacant and developed urban land in the OB counties.

Table 4.3.2.7-1. Urban land availability in OB counties.

OB LOCATION	COUNTY (BASE YEAR)	URBAN LAND IN COUNTY (ACRES)			SOURCE ^F
		VACANT ^I	DEVELOPED	TOTAL	
Coyote Spring, NV	Clark (1977)	96,000 ^J	44,335	140,335	Clark Co., 1977
Ely, NV	White Pine (1976)	893	1,872	2,765	White Pine Co., 1976
Bery1, UT	Iron (1978)	4,961	3,160	8,121	Five-County Assoc., 1978;
Delta, UT	Millard (1979)	5,761	3,415	9,176	Six-County Commissioners, 1979
Millford, UT	Braver (1978)	699	992	1,691	Five-County Association, 1978
Clovis, NM	Curry (1980)	2,475	8,545	11,020	EPCOG
Dalhart, TX	Dallam (1978)	N/A	N/A	7,900	Panhandle Planning Commission,
	Hartley (1978)	N/A	N/A	24,678	1978

3718-2

^IIncludes land within the existing incorporated and unincorporated communities, except as noted.

^JRepresents the vacant land in the four unincorporated cities in Clark County. An additional 216,000 acres are vacant in the unincorporated portions of the Las Vegas Valley.

Urban Land Use--Proposed Action

For comparison purposes with the vacant and developed land the analysis uses the urban land requirements for two separate years. The years selected are the year of peak demand which varies by county between 1985-1989, and the year representing long term demand (1994). Table 4.3.2.7-2 provides the peak year and long term urban land area requirements generated by M-X-related population in the OB counties and the percentage of vacant and developed land these requirements represent.

The projections of the urban land area requirements are made on a county by county basis. In the analysis, the OB counties are discussed in detail, while the adjacent counties with small spillover effects receive less attention. It is assumed that operations workers will select residential locations within commuting distance of the OB site and the OB county receives the major share of the population and its demands for urban land.

The derivation of the urban land requirements employed the use of a computer model. Additional information on the model and inputs may be found in the document "Socioeconomic Impact Analysis Model" (ETA-28).

PROPOSED ACTION (4.3.2.7.2)

DDA Impacts

The Proposed Action will have impacts upon the amount of land needed for urban development in the nearby communities. The incoming workers and households will require additional land to be converted from other uses to accommodate housing, businesses, schools, public facilities, and streets.

Coyote Spring OB Impacts

It is assumed that the incoming workers for the first operating base will reside in communities within reasonable commuting distances of the Coyote Spring Valley site, including communities in the Las Vegas and Moapa Valley areas of Clark County and the Alamo community in Lincoln County. Since 90 percent of the permanent requirements for additional community land is in Clark County, it is used as the basis for the analysis of the urban land area requirements. In 1977 there were 43,335 acres of developed urban land in the cities of Las Vegas, North Las Vegas, Henderson, and Boulder City and the unincorporated portions of Clark County in the Las Vegas Valley. The four cities had a total of approximately 96,000 vacant acres that are assumed to be available for development in this analysis, with most of this acreage concentrated in the cities of Las Vegas and North Las Vegas.

In the peak year, the Proposed Action would generate demand for about 2,800 acres of additional urban land in the county. This amount of land is equivalent to 6.3 percent of the developed land in the Las Vegas Valley and 2.9 percent of the vacant land within the area of the four incorporated cities. The long term demand for additional urban land in Clark County, as a result of the Proposed Action, would be 530 acres, which constitutes 1.2 percent of the existing developed land in the Las Vegas Valley and 0.6 percent of the vacant land in the four incorporated cities as of 1977. The consequences of the urban land area requirement in Clark County under the Proposed Action are not likely to be significant. Although future projections of land development are not available on a yearly basis for Clark County, it is

Table 4.3.2.7-2. M-X induced impacts on urban land requirements.

ALTERNATIVE	FIRST OR SECOND OR	ACRES OF URBAN LAND REQUIRED IN OB COUNTY	PEAK YEAR		LONG TERM	
			VACANT	DEVELOPED	ACRES OF URBAN LAND REQUIRED	
					PERCENT OF LAND IN BASE YEAR	PERCENT OF LAND IN BASE YEAR
PA	Coyote Spring	2,812	2,9	6.3	530	0.6
	Milford	1,512	216.3	152.4	704	100.7
1	Coyote Spring	2,816	2,9	6.4	530	0.6
	Bery]	1,471	29.7	46.6	66.3	13.1
2	Coyote Spring	2,744	2,9	6.2	527	0.6
	Delta	2,027	35.2	59.4	727	12.6
3	Bery]	1,871	37.7	59.2	894	18.0
	Ely	2,151	240.9	116.6	761	85.2
4	P-ryl	1,871	37.7	59.2	804	18.0
	Coyote Spring	2,058	2.1	4.6	407	0.4
5	Milford	2,017	288.6	203.3	942	134.8
	Ely	2,151	240.9	116.6	761	85.2
6	Milford	2,017	288.6	203.3	942	134.8
	Coyote Spring	2,048	2.1	4.6	406	0.4
7	Clovis	2,528	102.1	29.6	1,015	41.0
	Balhart**	2,288	9.3*	9.3*	732	3.0*
8	Coyote Spring	1,858	1.9	4.2	522	0.5
	Clovis	2,050	83.2	24.1	802	32.4

*This figure represents the percentage of total urban land, not vacant or developed urban land.

**Land requirements calculated for Hartley and Fallam Counties total.

Urban Land Use--Proposed Action

anticipated that the Proposed Action would constitute a minor share of the baseline urban, land conversion expected during the peak years.

The M-X-related urban land conversion by the peak year would be approximately 5.3 times as great as that required in the long term if land were developed to meet all of the requirements in the peak year. However, it is expected that the peak requirement will not be totally accommodated by structures built on a permanent basis but rather by land development with the following characteristics: 1) use of temporary facilities which require a relatively low capital investment and are easily removed, with land returned to its former use, following the end of the construction period, e.g., mobile homes, temporary school classrooms, unpaved roads; 2) crowding of certain permanent facilities during the peak "boom" period, such as housing, retail sales space, classrooms, streets and highways, and 3) possible overbuilding of some permanent facilities such as housing, and retail sales space. Mitigations for the impact of the urban land requirements are provided at the end of the section.

Milford OB Impacts

Beaver County, Utah would be the primary residential area for the second operating base near Milford. Spillover of base-related population would generate some demand for additional land devoted to urban uses in several communities in Iron, Washington, and Millard counties. The present analysis of the urban land requirements focuses on Beaver County, although greater detail for adjacent counties is presented in Chapter 4. Within Beaver County, the community of Milford would be likely to experience the generated share of the urban land development generated by the Proposed Action, while lesser effects would be felt in the communities of Beaver and Minersville. In 1978, Beaver County had 992 acres of developed urban land and 699 acres of vacant land within the present boundaries of its communities.

The effect of the Proposed Action on requirements for urban land in Beaver County follows a pattern of large increases during the construction "boom" followed by declines to considerably lower permanent requirements. In the peak year, 1,512 acres of urban land would be required while in the long term the demand for additional urban land as a result of the Proposed Action is 704 acres. A large share of the facilities provided during the "boom" period are likely to be temporary, so that the land could ultimately revert back to non-urban uses.

The urban land requirements are relatively high in Beaver County under the Proposed Action compared to the land requirements in other OB counties under other alternatives. The urban land requirements, during the peak year represent 152 percent of the developed land and 216 percent of the vacant urban land while in the long term the equivalent proportions are 71 percent and 100 percent, respectively. Changes of this magnitude will significantly alter the residential shopping, transportation, and business patterns in Beaver County.

The normal baseline requirements for additional urban land in the communities of Beaver County would be small, relative to the growth resulting from the proposed action during initial construction years.

ALTERNATIVE I (4.3.2.7.3)

Under Alternative I the location of the first operating base remains the same as in the Proposed Action while the second OB would be changed. The urban land requirements related to the OB at Coyote Spring remain the same as for the Proposed Action while requirements in Iron County would increase significantly with a concomitant decrease in Beaver County.

Beryl OB Impacts

Although several adjacent counties are likely to experience project-related increases in demands for urban land, Iron County, Utah is used as the basis for the analysis of the urban land area requirements for the base near Beryl. Communities which may be affected in adjacent counties include Minersville and Milford in Beaver County, Enterprise in Washington County, and Pioche-Panaca in Lincoln County, Nevada. Within Iron County, the Cedar City area and Newcastle as well as the rural area near the base site would likely experience the greatest portion of the base-related urban land development. In 1978 Iron County had 3,160 acres of developed urban land and 4,961 acres of vacant urban land.

In the peak year, 1,471 acres of urban land would be required, while in the long term demand would be lowered to 663 acres as construction related population leaves the area. The peak year requirements are 2.2 times as great as the long term needs. The urban land requirements in the peak year represent 47 percent of the developed land and 30 percent of the vacant urban land while in the long term the equivalent proportions would be 21 percent and 13 percent, respectively. Changes of this magnitude will significantly alter the residential shopping, transportation, and business patterns in Iron County.

The rate at which the conversion of land will take place, either from vacant to developed or rural to urban, will impact Iron County in a highly significant manner. The normal baseline community land development in Iron County would be small relative to the growth induced by the M-X project during the initial construction years.

ALTERNATIVE 2 (4.3.2.7.4)

The location of the base near Coyote Spring Valley would remain the same as in the Proposed Action while the second OB would be located near Delta, Utah. The requirements for additional land devoted to urban uses in Millard County would increase significantly. In 1979 Millard County had 3,415 acres of developed urban land and 5,761 acres of vacant urban land. Although some requirements for additional urban land are likely to be experienced in adjacent Juab and Beaver counties, the largest demand, more than 85 percent, would be in Millard County. The Delta-Hinckley area would likely receive the greatest increase in demand for urban land, while lesser effects could be felt in the communities of Fillmore and Holden.

Delta OB Impacts

In the peak year 2,027 acres of urban land would be required while in the long term demand is considerably lower at 727 acres. The peak year requirements are

2.8 times as great as the long term needs. Much of the demand in the peak year is likely to be met by temporary facilities such as mobile homes, with land reverting back to non-urban uses in the long term. The community land requirements in the peak year represent 59 percent of the developed land and 87 percent of the vacant residential land while the equivalent proportions in the long term are 21 percent and 31 percent, respectively. Changes of this magnitude will significantly alter the urban shopping, transportation, and business patterns in Millard County.

The rate at which the conversion of land to urban uses would take place would have significant consequences since baseline growth would be small relative to the growth induced by the M-X project during the initial construction years.

ALTERNATIVE 3 (4.3.2.7.5)

Operating bases near Beryl, Utah and Ely, Nevada are proposed under Alternative 3. Requirements for additional urban land in Iron County as a result of the base near Beryl would be higher by about 400 acres, or 27 percent, in the peak year than is projected for Alternative 1. Impacts on available lands for development in Iron County will be correspondingly higher under this alternative.

Ely OB Impacts

White Pine County, Nevada is used as the basis for the analysis of the urban land area requirements for the second OB site at Ely. The Ely community is likely to experience the greatest share of the project-induced demand for land development, with lesser effects likely in Ruth and McGill. In 1976 White Pine County had 1,872 acres of developed urban land and 893 acres of vacant urban land. In the peak year 2,151 acres of additional urban land would be required while the long term demand would be considerably lower at 761 acres. The peak year requirements are 2.8 times as great as the long term needs. The peak land requirements represents 116 percent of the developed land and 241 percent of vacant land. The long term demand is equivalent to 41 percent and 85 percent, respectively, of the developed and vacant urban land. Changes of this magnitude will significantly alter the residential, shopping, transportation, and business patterns in White Pine County.

The rate at which the conversion of land to urban uses would take place would likely have significant consequences since the baseline growth in White Pine County would be small relative to the growth induced by the M-X project during the initial construction years.

ALTERNATIVE 4 (4.3.2.7.6)

Under Alternative 4 operating bases are proposed to be located near Beryl, Utah and at Coyote Spring Valley, Nevada. The urban land requirements generated as a result of the base near Beryl (Iron County, Utah) would remain the same as for Alternative 3.

The second operating base at Coyote Spring Valley would require about 27 percent less urban land in the peak year than projected for the Proposed Action. Additional demand for urban land in Clark County would total 2,058 acres in the peak year while the long term demand would be substantially lower at 407 acres. The peak year requirements are four times greater than the long term needs.

The urban land requirements in the peak year represent 4.6 percent of the developed land and 2.1 percent of the vacant land in the county while the equivalent proportions would be 0.9 percent and 0.4 percent, respectively, in the long term. Changes of this magnitude would not significantly alter the residential, shopping, transportation, and business patterns in Clark County. The urban land conversion induced by the M-X project would be small relative to the amount which is likely to occur without the project.

ALTERNATIVE 5 (4.3.2.7.7)

Alternative 5 proposes an OB I near Milford, Utah (Beaver County) and a secondary OB near Ely, Nevada (White Pine County). Requirements for additional urban land would be higher by one third than projected for the Proposed Action. Beaver County would experience demand for 2,017 additional acres of urban land in the peak year as a result of the base near Milford. The long term requirements for urban land would be considerably lower at 942 acres. The peak year requirements would be 2.1 times as great as the long term needs.

The urban land requirements in the peak year represent 203 percent of the county's developed land and 289 percent of the vacant urban land while the equivalent long term proportions area 95 percent and 135 percent, respectively. Changes of this magnitude will significantly alter the residential, shopping, transportation, and business patterns in Beaver County. The rate at which the conversion of land to urban use would take place would likely have significant consequences to Beaver County since the normal baseline land development would be small relative to the growth induced by the M-X project during the construction phase.

The urban land requirements for the second operating base at Ely (White Pine County, Nevada) remain as described for Alternative 3.

ALTERNATIVE 6 (4.3.2.7.8)

Under Alternative 6, operating bases are proposed at Milford, Utah (Beaver County) and at Coyote Spring Valley, Nevada (Clark County). The projected urban land requirements in Beaver County would remain as described for Alternative 5. The project induced requirements for additional urban land in Clark County are projected to be similar to the requirements under Alternative 4.

ALTERNATIVE 7 (4.3.2.7.9)

Under Alternative 7, with full deployment in Texas/New Mexico, the operating bases would be located near Clovis, New Mexico (Curry County) and the Dalhart, Texas (Hartley County). The following analysis examines the most significant urban land area requirements which are in the OB counties in Texas/New Mexico. More inclusive analyses in Chapter 4 and the technical reports appendices (ETA's 8 and 9) provide discussion and tables of the urban land requirements in the non-OB counties in Texas/New Mexico.

Clovis OB Impacts

The analysis of urban land requirements for the base at Clovis is for Curry County only, although a small amount of demand for land in community uses would

be experienced in Roosevelt County in nearby Portales. In Curry County the major share of the effects are likely to be felt in the area from Clovis to Melrose. Curry County had approximately 2,475 acres of vacant and 8,545 acres of developed urban land in 1980. In the peak year 2,528 acres of additional urban land are projected to be required as a result of the project. It is likely that some of the peak year demands for housing, retail business, streets, and public facility land uses would be met by temporary facilities such as mobile homes, with the land reverting back to non-urban uses after the construction boom. The long term demand is projected to be considerably less than in the peak year. The long term requirements, 1,015 acres, are about 60 percent less than are the urban land needed during the peak year.

The peak land requirements represent 30 percent of the total amount of land currently in urban uses in Curry County while the equivalent proportion in the long term would be 11.9 percent. The comparable proportions for vacant urban land are 102 percent in the peak year and 41 percent in the long run. Changes of this magnitude are likely to significantly alter the urban residential, transportation, and business patterns in Curry County. The rate at which the conversion of land to urban uses would take place is likely to have significant consequences since normal baseline land development in Curry County would be small relative to the growth induced by the project during the construction period.

Dalhart OB Impacts

Hartley and Dallam Counties, Texas, would receive the largest share of the increased demand for land in urban uses, although sizable effects are also projected for Moore County and the metropolitan Amarillo area. The present analysis is limited to Hartley and Dallam, with additional details in Chapter 4. In 1978, Hartley County had 24,700 acres and Dallam County 7,900 acres of land in urban uses. The communities most likely to be affected in the two-county area are Dalhart, with the greatest share of the demand, and Hartley and Channing. In the peak year 2,288 acres of additional urban land would be required while the long term demand, 732 acres, is only one-third as large. The urban land requirements in the peak year represent 1 percent of the total urban land in Hartley and Dallam Counties while the equivalent long-term proportion is 3 percent.

ALTERNATIVE 8 (4.3.2.7.10)

Alternative 8, with split deployment in the Nevada/Utah and Texas/New Mexico areas, distributes the urban land use requirements into two distant regions.

Peak year requirements for urban land in Clark County would be less than projected for the Proposed Action. Clark County would experience demand for 1,858 acres of additional community land in the peak year, a decrease of 954 acres or 34 percent from the Proposed Action. In the long term the demand would be 522 acres, about the same as for the Proposed Action. The peak year requirements are 3.6 times as great as the long term needs. The peak requirements for additional land in urban uses represent 4 percent of the county's developed land and 2 percent of the vacant urban land while the equivalent proportion in the long term are 1.2 percent and 0.5 percent, respectively. Changes of this magnitude would not significantly alter the residential, shopping, transportation, and business patterns in Clark County.

Requirements for additional land in community uses in Curry County would be lower (18.5 percent less) in the peak year than projected for Alternative 7. The projected demand for additional urban land in the peak year is 2,060 acres while in the long term the requirements for 802 acres, about 21 percent less than projected for Alternative 7. The peak year requirements would be 2.6 times as great as the long term needs. The peak land requirements represent 24 percent of the total land currently in urban uses in Curry County while the proportion of vacant land is 83 percent. The long term demand is equivalent to 32 percent of the vacant land. The rate at which the conversion of vacant land to urban uses would take place would likely be significant.

URBAN LAND USE MITIGATION STRATEGIES

The following mitigation approaches, could be undertaken by different levels of government (local, state, and federal) to aid in reducing the adverse consequences of large-scale conversion of non-urban land to community urban uses:

- o Set up impact mitigation task force with local, regional, and state officials, business representatives, ranchers, farmers, Air Force representatives, etc. to advise local and regional governments. Advisory committees could be established to facilitate the flow of information, identify problems and needs, and seek the means for meeting the needs in a timely manner.
- o Application by local and regional governments for HUD 701 Comprehensive Planning Program Grants and Community Development Block Grants to support local land use planning efforts.
- o Preparation or updating and adoption of zoning ordinances, subdivision regulations, and comprehensive plans by local governments to guide growth.
- o Development of the capacity at municipal and county level to enforce zoning ordinance and subdivision regulations.
- o Utilization of land banking by municipalities, counties, or states to direct temporary urban facilities to suitable locations during peak construction period.
- o Encouragement through county or state actions, the establishment of new towns or development zones to handle a portion of the peak and/or long term urban land needs.
- o Encouragement by local and regional governments of the design of temporary facilities that will provide benefits over the long term, e.g., facilities for mobile homes that can be used as campgrounds and RV overnight areas centers following the end of the construction period.
- o Establishment of urban service areas to ensure that urban development will take place only within designated zones.
- o Designation of planned unit development (PUD) zones where a mixture of land uses specially suited to construction workers and their families may

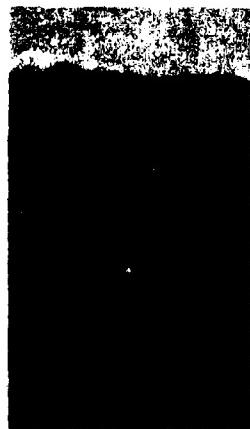
Urban Land Use--Alternative 8

be developed on a temporary basis, e.g., housing, recreation, neighborhood commercial, day-care facilities. Such PUDs would encourage the selection of housing by workers in suitable locations rather than in outlying rural and/or agricultural areas.

- o Establishment of a up state assistance program to identify federal sources of funds for local and regional land use planning programs.
- o Establishment of state and university sponsored training programs in land use and growth management for officials and administrators in affected local governments.
- o Creation of a department of local affairs at state levels to provide technical assistance for land use planning.
- o State actions to ensure that regional planning commissions examine issues of regional significance vis-a-vis urban land use, e.g., availability of urban land, conversion of agricultural land to urban land, and the impingement of urban uses into rural areas.
- o Federal provisions of funding for local and regional land use planning efforts (HUD 701, CBDG; EPA; EDA) and for infrastructure to support land development.
- o Use of Four Corners Regional Commission to coordinate federal, state, and local activities.
- o Provisions of land to be used on temporary basis for development of urban land uses (housing, neighborhood commercial, recreation, etc.) needed by construction workers and families. Land could be administered and/or leased by BLM, Department of Defense, or other federal agencies.

Many of these potential mitigation strtegies are currently being planned in a cooperative effort between the Department of Defense and potentially affected jurisdictions.

Quality of Life



QUALITY OF LIFE

INTRODUCTION (4.3.2.8.1)

Quality of life means different things to different people. It includes a job, hopefully a meaningful one with purpose and tangible results; it also means an opportunity to purchase goods and services that can make life more enjoyable. That enjoyable life would include adequate housing and transportation, good schools and religious facilities, and, for emergencies, medical and health care, police protection, and fire and safety services. When many of the basic needs are satisfied, quality of life broadens into the environment to include recreation, a weekend at the lake, the opportunity to be alone with yourself and your family, the clean air to see the next mountain and the freedom to climb it.

The concerns expressed by local residents about population growth and housing and the attitudes toward potential impacts to mining and grazing and water, are all tied to this concept of quality of life. The aspiration and concerns of old-time residents and newcomers will revolve around the quality of life that existed, exists, and will exist in the communities, the counties, and the valleys where M-X is finally deployed. A large negative impact can occur when in-migration causes rapid, heterogeneous population growth, especially if the growth is followed by an equally rapid decline in employment after the boom. Growth in excess of 15 percent per year can strain social organization and the adequacy of housing, social services and other infrastructure. Indicators of social stress include rates of crime, divorce, and suicide.

Beneficial impacts will be most noticeable near operating base locations and will include economic impacts such as greater economic stability and diversity as well as more and better paying jobs. Noneconomic benefits include better health care and community facilities and greater educational opportunities.

Some individuals will express antagonism, even fear, at what they perceive to be a loss of lifestyle; others will herald the change and proclaim the total benefits of new growth, new vitality. Neither will be completely correct for M-X and its related activities will change the lifestyle of most residents in the deployment area. The degree to which the change is categorized as "bad" or "good" will depend upon two factors:

- o the attitude of people affected toward change.
- o the degree to which plans for potential change are made and implemented.

The individual who fears change, perceives change as bad, and refuses to plan for it will be impacted the most if change occurs. The individual who anticipates the change and plans to adjust, regardless of his or her attitude toward change, will find such change neither all bad nor all good, but acceptable and workable. Communities, as well as individual plans and perceptions, are equally central to this concept.

The M-X caused change to quality of life will be in two phases: during construction and during operation. The major detrimental impacts will occur in the short-term, during construction. In the long-run, the Air Force has been a successful neighbor to communities through the West. One of the most difficult activities the Air Force has attempted in peace time is the closing of a base. When an announcement is made that a base will close anywhere in the nation, local opposition to the closing comes through congressmen, through local petitions, and through economic and environmental studies. In base closure cases, the people of the affected communities, both long-term residents and new residents have expressed the opinion that the Air Force base contributed to an improved quality of life for the community.

There are changes underway which will affect the quality of life in the states and counties under consideration for M-X basing whether or not M-X occurs. Energy and mineral development will come; and the impacts may not be mitigated through federal support. For example, Route 6 in Nevada between the Railroad Valley oil fields and Tonopah, Nevada has been degraded due to industrial traffic; Tonopah itself has become a new mineral boomtown; Ely, Nevada, is economically depressed due to the mineral boom-bust cycle, but could boom again with the White Pine Power Project. Increasing energy and labor prices combined with drawdown of the Ogallala aquifer have economically hurt Texas and New Mexico farmers, ranches, and their associated communities.

Since perception of quality of life and its components is highly individualistic and changeable, an overall assessment of the M-X generated impact is difficult. The impact to lifestyle and associated quality of life will be related to population increase. At the regional level, the increase in job opportunities and in per capita incomes will be perceived by many residents as positive, keeping new entrants to the job market within the region, and increasing the economic diversity of the area. Impacts will be felt most acutely in the small community-rural areas with private land and some established services.

The projected changes to quality of life involve both quantifiable and abstract elements. The quantifiable include population growth, police, housing, health services, community infrastructure elements, and education. Each resource or resource category that is quantifiable is presented under its own subheading.

Abstract items in addition to the quantifiable elements include:

- o Institutions: governmental, religious, educational, and recreational features will diversify and become more heterogeneous in the impacted communities.

Quality of Life--Proposed Action; Alternatives 1-6

- o Social Structure: Relative and absolute changes will alter the interconnected system of lives and institutions; neighbors may become more distant, the structure of institutions may become more formalized.
- o Cultural: certain related, traditional, and isolated ways will be replaced by a more progressive and competitive culture.
- o Personal Lives: resident roles will be changed and redefined, more people with different behavioral characteristics will be present, and each individual will become a smaller part of the larger whole.

Sociologists agree that measures of quality of life may be degraded at growth rates in excess of 15 percent or at employment growth rates of 8 percent or more for three consecutive years. Quality of life will be most greatly influenced near operating bases. Only Clark County with a large current population is able to absorb the growth associated with an operating base without exceeding these rates of growth.

Tables 4.3.2.8-1 and 4.3.2.8-2 indicate counties in which high rates of population growth are predicted to exceed levels which may degrade quality of life.

PROPOSED ACTION AND ALTERNATIVES 1-6

All communities within or adjacent to the DDA will undergo a change during construction which will alter the present residents' lifestyle. The smaller, static, and more homogeneous communities are the ones likely to be impacted the most. The large, dynamic, heterogeneous communities will be better able to cope with the change.

Large city suburban residents who are used to a dynamic lifestyle will face some inconvenience due to temporarily stressed local services. Small community-rural residents, unless they plan for the change, will find the increased crowding, diversity of cultural and religious backgrounds, and new demands upon community services during construction to be overwhelming. Details in this EIS for such areas as population in-migration education, land use and community service requirements, and health service needs will form the basis for planning efforts. Planning for growth and needed services is mandatory to preserve the elements of small quality of life while obtaining the benefits of economic stimulation.

The fact that various sized communities in the region have experienced major growth and construction over the past decades yet still retain a desirable quality of life strongly argues that the growth of the M-X system can be accommodated and the new residents assimilated in the present local residents will work together with the newcomers to retain a desirable lifestyle. With the proposed M-X action Lund, Utah could look like Minersville or Milford; Minersville or Milford like Cedar City; and Cedar a doubled-in-size urban community. But although each community would change the quality of life that appeals to residents and visitors could be retained.

ALTERNATIVE 7

In many ways the small community-rural lifestyle of Texas/New Mexico is similar to that which prevails in southwestern Utah. The farming communities are

Table 4.3.2.8-1. Characterization of population growth in Nevada/Utah deployment region.

COUNTY*	PROPOSED ACTION	ALTERNATIVES						
		1	2	3	4	5	6	8A
Clark (PS, 1, 2, 4, 6, 8)	I, S, P S, P S, P S, P P	L, S, P S, P S, P S, P P	I, S, P S, P S, P S, P P	L, S, P S, P S, P S, P P	I, S, P S, P S, P S, P P	L, S, P S, P S, P S, P P	L, S, P S, P S, P S, P P	L, S, P S, P S, P S, P P
Eureka	S, P							
Lincoln	S, P							
Nye	S, P							
White Pine (3, 5)	S, P							
Beaver (PA, 5, 6)	I, S, P	S, P I, S, P	S, P L, S, P	S, P S, P S, P	S, P S, P S, P	S, P S, P S, P	P P P	L, S, P S, P S, P
Iron (1, 3, 4)	S, P							
Juab	S, P							
Millard (2)	P	P	S, P	P	P	P	P	P
Salt Lake/Utah	L	L	L	L	L	L	L	L
Washington	L	L	L	L	L	L	L	L

*Numbers in parenthesis indicate alternatives for which counties contain an operating base.

S = Sustained annual growth of 8.0 percent or more for at least three years.

P = Peak growth of at least 15.0 percent in any one year.

L = Less annual growth than S and P.

3924-1

Table 4.3.2.8-2. Characterization of population growth in the Texas/New Mexico deployment region.

COUNTY	ALTERNATIVE	
	7	8B
Bailey	S	L
Castro	L	L
Cochran	L	L
Dallam	S, P	P
Deaf Smith	L	L
Hale	L	L
Hartley (7)	S, P	S, P
Hockley	L	L
Lamb	L	L
Lubbock	L	L
Moore	L	L
Oldham	L	L
Parmer	P	P
Potter/Randall	L	L
Sherman	L	L
Swisher	L	L
Chaves	L	L
Curry (7, 8)	S	S
DeBaca	L	L
Harding	S, P	S, P
Quay	P	P
Roosevelt	P	L
Union	L	L

3925-1

*Numbers in parenthesis indicate alternative(s) for which counties contain an operating base.

S = sustained annual growth of 8.0 percent or more for at least three years.

P = Peak growth of at least 15.0 percent in any one year.

L = Less annual growth than S and P.

small, with medium-sized cities regularly spaced. Agriculture dominates employment. The Texas/New Mexico communities have common religious beliefs, a common farming heritage, and have changed little in past decades. Larger cities with suburban lifestyles are located on the DDA's periphery.

The main differences between the Texas/New Mexico and Nevada/Utah DDAs are the population density throughout the area (much higher in Texas/New Mexico than in Nevada/Utah) and the land ownership (nearly all private in Texas/New Mexico). These two differences highlight the key quality of life variables that would be impacted in Texas/New Mexico; private land and relocation of people. The relocation of people can take one of three forms:

- o Physical movement of residence or other facilities to another part of the present owner's property.
- o Construction of a new home on the present owner's property and dismanteling of the existing structure.
- o Relocation of the individuals from the existing parcel to alternative parcels or to existing communities.

Although the total population relocation is less than would be associated with highway construction through an urban neighborhood, the broad distribution of the impact combined with a deep connection to the land makes such change a significant impact to present lifestyle.

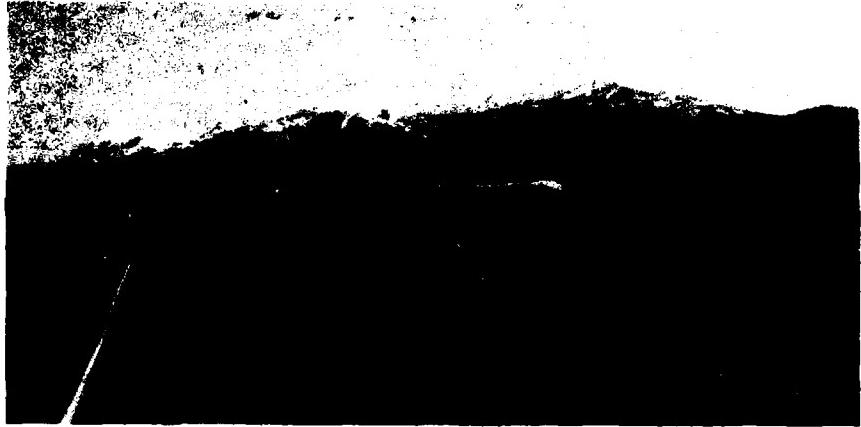
ALTERNATIVE 8

The split basing alternative reduces the overall impacts upon each of the alternative system DDAs and concurrently deploys the system in a way designed to reduce the community specific impacts.

The Nevada/Utah system is deployed to concentrate the system around the central Coyote Spring operating base and the more urban Clark County. This results in reduced impacts from both construction and operation in the rural communities on the periphery of the system. Although the regional impacts are reduced, specific counties such as Lincoln and Clark will still be impacted by a large, diverse construction workforce.

The Texas/New Mexico split-basing DDA was selected to minimize impact upon residents through minimum relocation and to reduce impact upon irrigated agriculture. Both of these steps preserve the rural, small community quality of life that currently prevails. Thus, the net effect of split basing is to more than proportionally reduce the impacts to the prevailing lifestyles in the respective areas.

Transportation



TRANSPORTATION

INTRODUCTION (4.3.2.9.1)

The transportation system within the project area might be significantly affected in two ways: it may be greatly expanded thus improving accessibility within the region, and traffic may increase as a result of the influx of people.

The impact on accessibility can be measured in terms of the degree of improvement of the road system in the area. The impact on traffic can be measured by the increase in traffic on the road system. The indirect impacts associated with increases in traffic and accessibility, such as noise, air pollution, use of recreation facilities, disturbance of sensitive areas, etc., are discussed in other sections of this DEIS.

PROPOSED ACTION (4.3.2.9.2)

DDA Impacts

No significant impacts are anticipated on air or rail traffic in the selected deployment area. More commercial flights may be scheduled to airports near OBs but this cannot be estimated. No air traffic overflight restrictions are anticipated except the normal restrictions that would apply over the OBs.

The Proposed Action would involve construction of approximately 8,500 miles of new roads in an area of the Great Basin which presently has relatively poor access. Figure 4.3.2.9-1 shows the existing road system within the affected region. Roads constructed for the project will be open to the public, producing a long term change in the accessibility in the area. The expansion of the road system would increase the accessibility into and within the region, which could encourage development and facilitate use of the area for recreation. This would increase the potential for damage to sensitive resources in formerly remote areas. Without this project it is unlikely that many new roads would be constructed in the region, except in the immediate vicinity of other major projects which may be constructed. Table 4.3.2.9-1 summarizes the impacts on accessibility and their significance for each of the subunits in the area.

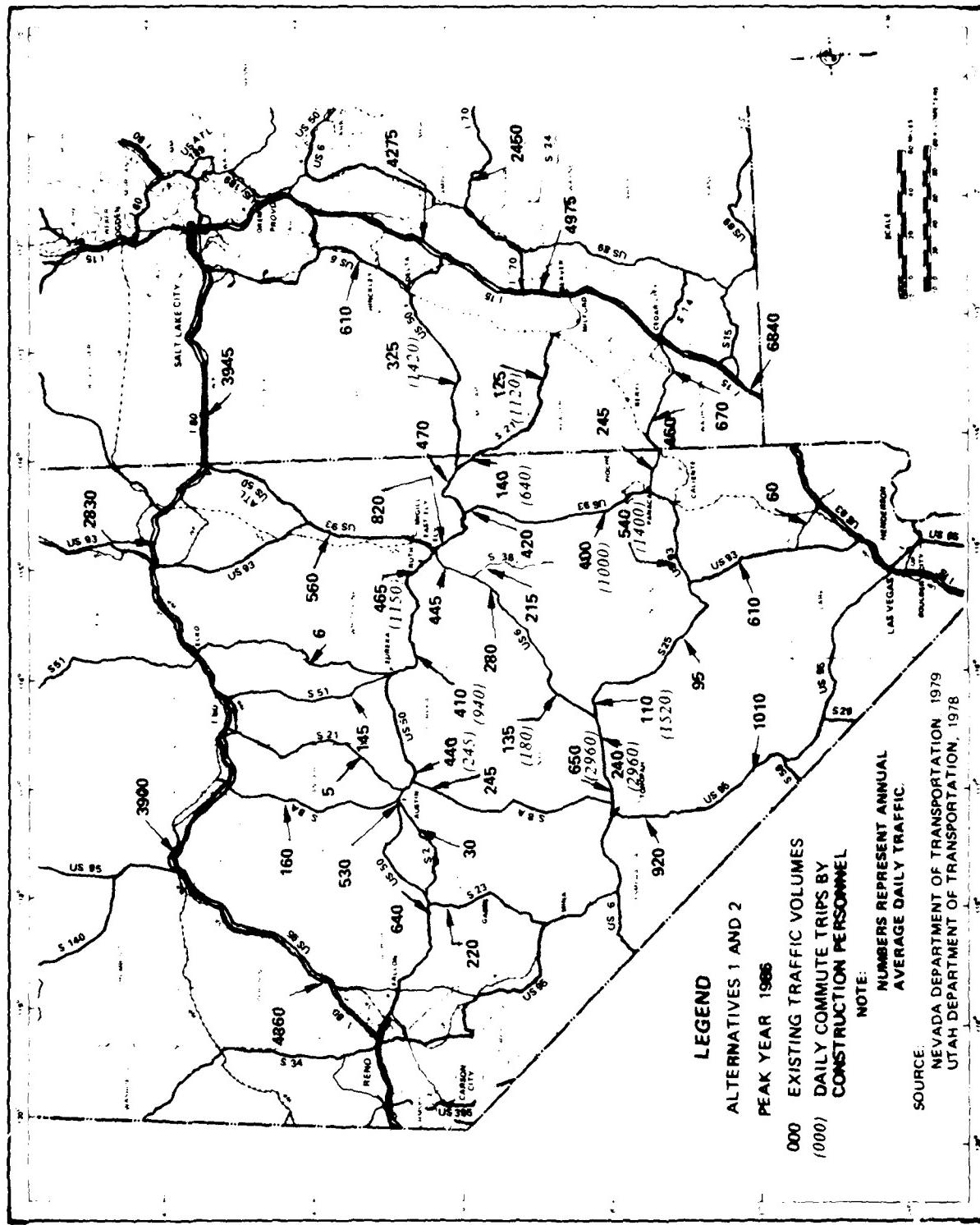


Figure 4.3.2.9-1. Existing and projected traffic volumes for Alternatives 1-6 during peak construction.

Table 4.3.2.9-1. Potential long-term impacts to accessibility and short-term impacts to traffic volumes due to location of DDA in Nevada/Utah for Proposed Action and Alternatives 1-6.

NO.	NAME	HYDROLOGIC SUBUNIT	TRAFFIC	ACCESSIBILITY
			SHORT-TERM IMPACT ¹	LONG-TERM IMPACT ²
Subunits with M-X Clusters and DTN				
4	Snake			
5	Pine			
6	White			
7	Fish Springs			
8	Dugway			
9	Government Creek			
46	Sevier Desert			
46A	Sevier Desert & Dry Lake ³			
54	Wah Wah			
137A	Big Smoky-Tonopah Flat			
139	Kobeh			
140A	Monitor—Northern			
140B	Monitor—Southern			
141	Ralston			
142	Alkali Spring			
148	Cactus Flat			
149	Stone Cabin ⁴			
151	Antelope			
154	Newark ⁵			
155A	Little Smoky—Northern			
155C	Little Smoky—Southern			
156	Hot Creek			
170	Penoyer			
171	Coal			
172	Garden			
173A	Railroad—Southern			
173B	Railroad—Northern			
174	Jakes ⁶			
175	Long			
178B	Butte—South			
179	Steptoe			
180	Cave			
181	Dry Lake ⁷			
182	Delamar			
183	Lake			
184	Spring			
196	Hamlin			
202	Patterson			
207	White River			
208	Pahroc			
209	Pahranagat			

3912-2

- ¹ No impact. (No or insignificant increase in traffic.)
- Low impact. (Some increases in traffic is expected, however, no road improvements should be required.)
- Moderate impact. (Increases in traffic likely to cause delay or inconvenience to motorists. Minor road improvements may be required at critical locations.)
- High impact. (Major increases in traffic expected which could generate requirements for substantial road system improvements.)
- ² No impact.
- Low impact. (New roads will only slightly improve access.)
- Moderate impact. (Quality of roads substantially improved.)
- High impact. (High quality roads constructed in areas where only a few or poor quality roads currently exist.)

³ Conceptual locations of Area Support Centers (ASCs).

Transportation--Proposed Action

The temporary influx of people into the region during the construction period would cause a large increase in traffic within the DDA during that period.

The impact would be greatest near construction camps, and within nearby communities, due to the presence of supply trucks, personnel buses, and private vehicles belonging to construction workers. While the total amount of traffic that might use the existing road network would, in most cases, not exceed its capacity, it would be substantially higher than current levels. This would cause occasional delays and inconvenience to motorists. Table 4.3.2.9-1 shows recent traffic volumes and projected traffic volumes during the peak construction year. In mountain passes, where capacity is severely reduced by steep grades and winding alignment, congestion might occur at times due to slow moving trucks, buses or construction workers commuting from nearby communities. The impact would be relatively short-term because each of the camps would be in use for only two to three years. Table 4.3.2.9-1 summarizes the projected traffic impacts within the DDA.

Communities within the region, especially those near construction camps, will be affected both by traffic increases associated with temporary population increases and by traffic passing through them to other destinations, such as construction camps. While the traffic will only be temporary, some street improvements such as widening or installation of traffic signals may be required at some locations in order to accommodate the traffic. The two communities likely to be affected the most are Tonopah and Ely.

Most of the construction traffic itself would use the project roads which are specifically designed to avoid intersection with heavily or even moderately travelled roads ways. At locations where project roads crossed existing roads there would be occasional delays to some motorists by the crossing of construction vehicles.

The anticipated increase in traffic on the existing roads would increase the maintenance efforts needed to keep the roads in good condition, especially during the construction period when heavy supply trucks would be using the existing roads.

During the operations phase only a small amount of traffic would use the existing roads in the DDA. There will be no long-term impacts on traffic.

Operating Base and their Vicinities

In the vicinities of the operating bases the major impacts would be due to increases in traffic on the existing road system which would cause inconveniences and delays to motorists, increase the amount of maintenance required, and may necessitate major road improvements. Within communities near the bases, major additions to the street system would be required to accommodate the traffic associated with an increase in population and to provide access to new housing units and commercial development.

During the construction of the operating bases, there would be a large influx of people into the nearby communities who would only remain a few years. The impacts associated with this temporary phenomenon could occur in either of two ways depending upon how the local communities planned for it. If no special provisions were made to accommodate this short term growth, the associated increases in traffic would likely strain the existing road system, exceeding capacity

Transportation--Alternative I

at critical intersections and along major streets. Congestion at these locations, especially during peak periods, would result. However, once the construction period was over, the traffic would subside to the levels anticipated for the long term operations phase.

On the other hand, if the road system was expanded to the extent necessary to accommodate the short term traffic levels, then traffic would flow smoothly, but the act of expanding the road system would be a major impact. Once the short term effect was over, the road system would be more than adequate to accommodate the long term traffic levels. In either case the short term impacts associated with increases in traffic would be significant.

The DDA impacts on traffic are summarized on Table 4.3.2.9-1 and the operating base impacts on traffic are summarized on Table 4.3.2.9-2.

Coyote Spring OB Impacts

The first operating base would be constructed at Coyote Spring under the Proposed Action. Once the base is operational, approximately 2,400 military and civilian personnel would be commuting to the base from neighboring communities, primarily Las Vegas. A comparable amount of construction workers would be commuting during peak construction activity. In order to accommodate this traffic, U.S. 93 between the base and I-15 would have to be widened to four lanes unless mitigation measures such as staggered work shifts or substantial use of bases or carpools are implemented. Traffic along State Route 7 will also increase considerably but it would still not exceed the available capacity. Within Las Vegas and other nearby communities, such as in Moapa Valley, improvements to the major streets may be required at some locations. This could include street widening or installation of traffic signals. The specific improvements that may be required depend upon where the new development actually occurs. Figure 4.3.2.9-2 shows the projected traffic volumes in the vicinity of Coyote Spring once the base is fully operational.

Milford OB Impacts

Under the Proposed Action the second operating base would be at Milford. The proposed site currently has access via unpaved roads only. If only the road to Milford were improved it would have to be widened to four lanes in order to accommodate the anticipated traffic. If the road to Minerville were also improved, two lanes would be adequate for both roads. This would also significantly reduce the amount of traffic that would have to pass through Milford to get to the base. Some roadway improvements to existing streets would be required in Milford in either case. Some improvements may also be required in other communities also, such as Minerville. Figure 4.3.2.9-3 shows the projected traffic volumes in the vicinity of Milford once the base is fully operational.

ALTERNATIVE I (4.3.2.9.3)

This alternative would utilize the same DDA as the Proposed Action as well as the first operating base at Coyote Spring. The second base would be at Beryl. In order to accommodate the anticipated traffic, the road between Beryl and Beryl Junction would have to be improved and widened to four lanes. Other minor

Table 4.3.2.9-2. Potential impacts on traffic which could result due to the location of the DDA and operating bases (OBs) for the Proposed Action and Alternatives 1-6.

HYDROLOGIC SUBUNIT NO.	NAME	LONG-TERM TRAFFIC IMPACTS ¹				
		BERYL, UTAH OB ALTS. 1,3,4	COYOTE SPRING VALLEY NEVADA OB P.A. & ALTS. 1,2,4 & 6	DELTA, UTAH ALT. 2	ELY, NEVADA OB ALTS. 3,5	MILFORD, UTAH P.A. & ALTS. 5,6
Subunits with OB Suitability Areas						
4	Snake					
5	Pine					
6	White					
7	Fish Springs					
8	Dugway					
9	Government Creek					
46	Sevier Desert					
46A	Sevier Desert-Dry Lake					
54	Wah Wah					
137A	Big Smoky-Tonopah Flat					
139	Kobeh					
140A	Monitor—Northern					
140B	Monitor—Southern					
141	Balston					
142	Aikali Spring					
148	Cactus Flat					
149	Stone Cabin					
151	Antelope					
154	Newark					
155A	Little Smoky—Northern					
155C	Little Smoky—Southern					
156	Hot Creek					
170	Penover					
171	Coal					
172	Garden					
173A	Railroad—Southern					
173B	Railroad—Northern					
174	Jakes					
175	Long					
178B	Butte—South					
179	Steptoe					
180	Cave					
181	Dry Lake					
182	Delamar					
183	Lake					
184	Spring					
196	Hamlin					
202	Patterson					
207	White River					
208	Pahroc					
209	Pahranagat					
Other Affected Subunits						
48	Beaver					
50	Millford					
51	Maggie Creek					
52	Lund District					
53	Beryl-Enterprise					
210	Coyote Spring					
212	Las Vegas					
216	Garnet					
217	Hidden—North					
218	California Wash					
219	Muddy River Springs					
220	Lower Moapa					

3913-2

 No impact. (No or insignificant increase in traffic on existing roads.)

 Low impact. (Some increase in traffic is expected, however, no road improvements should be required.)

 Moderate impact. (Increase in traffic likely to cause occasional delay or inconvenience to motorists. Minor road improvements may be required at critical locations.)

 High impact. (Major increases in traffic expected which could generate requirements for substantial road system improvements.)

¹Conceptual location of Area Support Centers (ASCs).

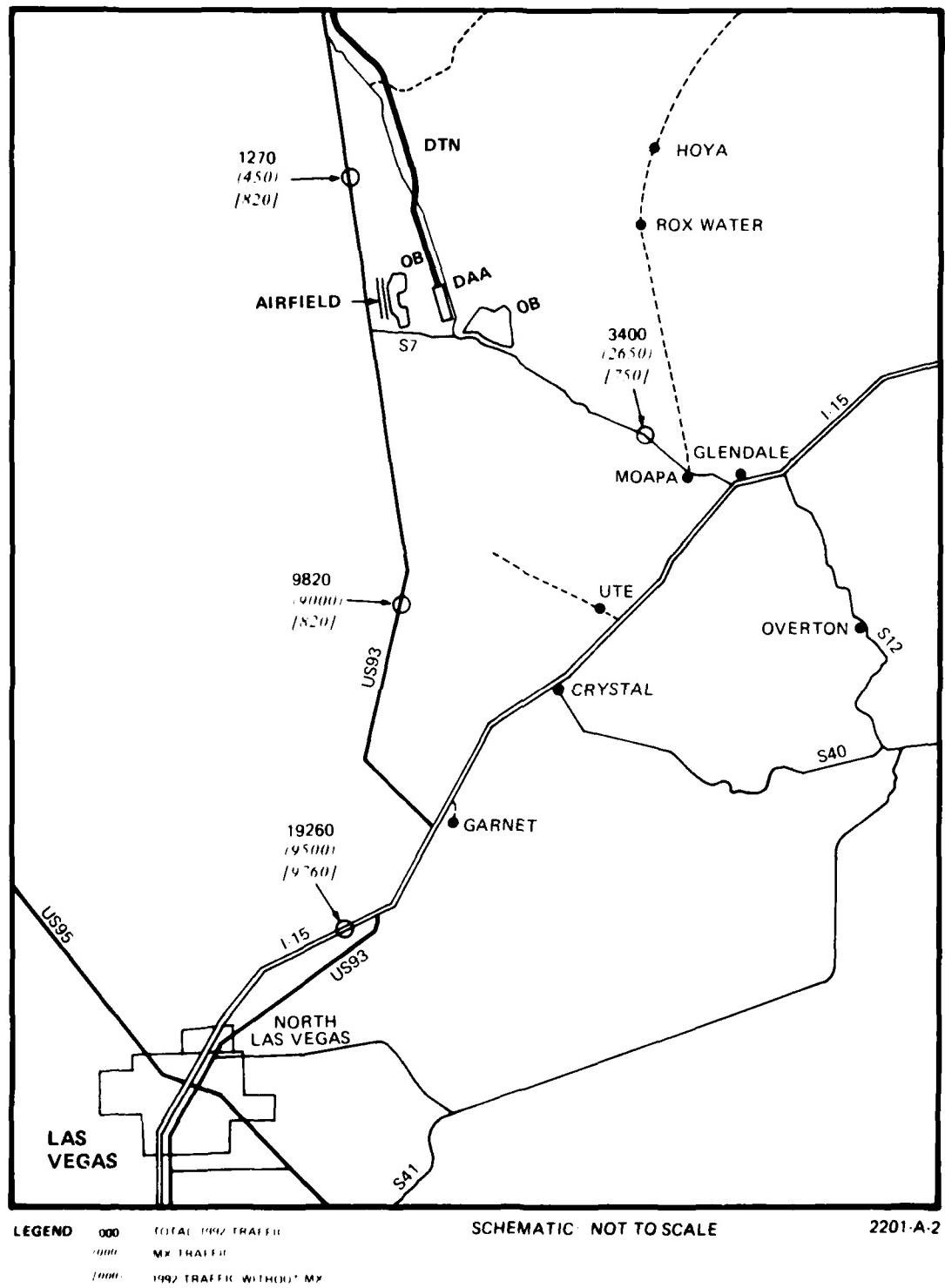
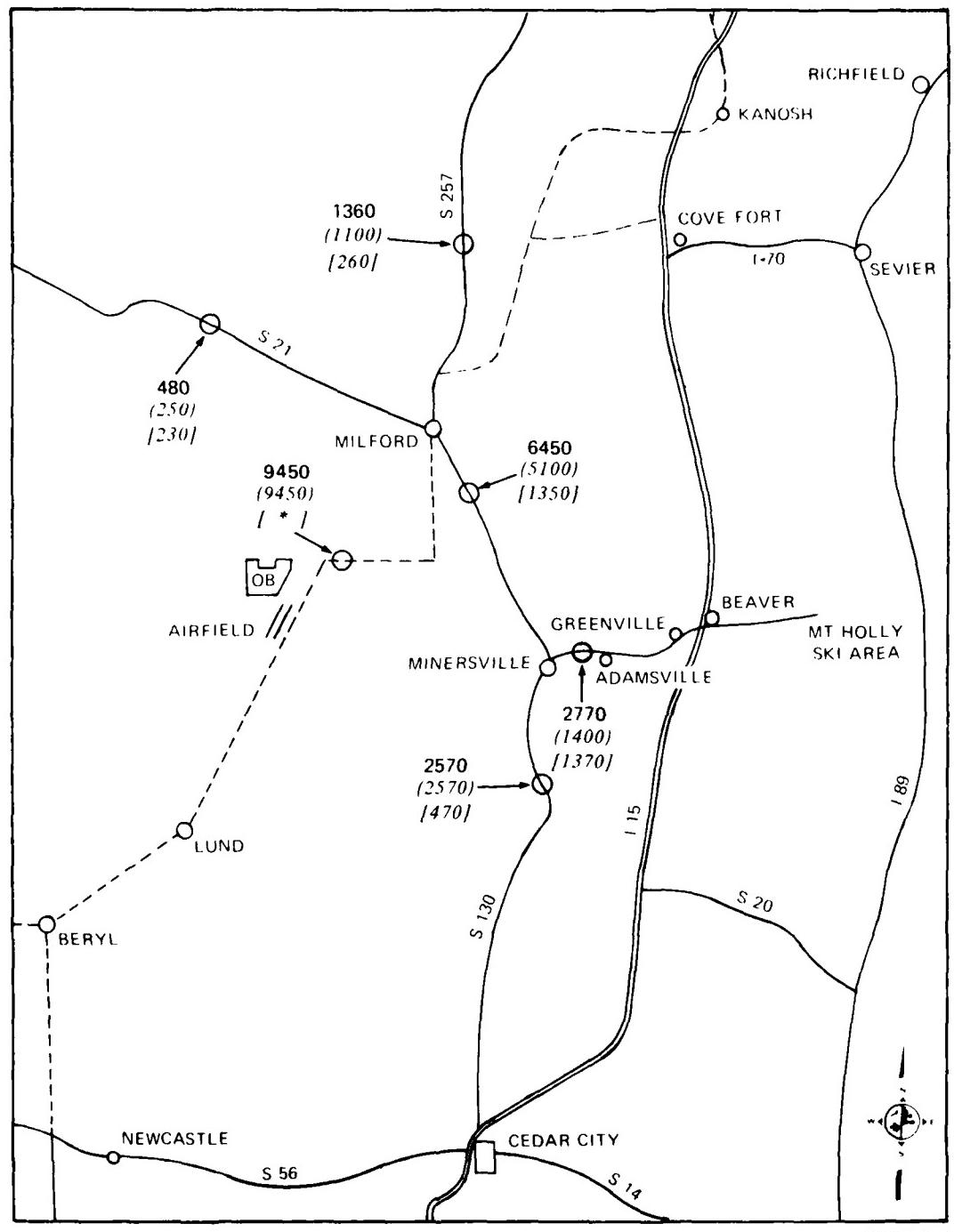


Figure 4.3.2.9-2. Projected traffic volumes in the vicinity of the Coyote Spring operating base for the Proposed Action and Alternatives 1, 2, and 8.



SCHEMATIC: NOT TO SCALE

Figure 4.3.2.9-3. Projected traffic volumes in the vicinity of the Milford operating base for the Proposed Action.

Transportation--Alternatives 2, 3, 4

improvements may be required but in general the existing road system near the base would accommodate the anticipated traffic without congestion. Table 4.3.2.9-2 summarizes the projected impacts on traffic near the Beryl operating base site. Within the nearby communities, primarily Newcastle, Enterprise and Cedar City, home improvements would be required on major streets in order to accommodate the anticipated traffic. Figure 4.3.2.9-4 shows the projected traffic volumes in the vicinity of Beryl once the base is fully operational.

ALTERNATIVE 2 (4.3.2.9.4)

The impacts would be the same as for the Proposed Action except that the second operating base would be at Delta. Due to the anticipated increase in traffic, US 50 between the proposed site and Delta would have to be widened to four lanes, but other roads in the vicinity should adequately accommodate the anticipated traffic. Since most of the off-base development would be expected to occur within or near Delta, spot capacity improvements and improved traffic control may be required at some locations. Table 4.3.2.9-2 summarizes the projected impacts on traffic near the Delta operating base site. Because the proposed site is near a construction camp location, the short term cumulative impacts during the construction period will be greater than that associated with construction of the second operating base under the Proposed Action. Figure 4.3.2.9-5 shows the projected traffic volumes once the base is fully operational.

ALTERNATIVE 3 (4.3.2.9.5)

This alternative utilizes the same DDA as the Proposed Action but the operating base locations are different. The first operating base would be near Beryl and the second operating base would be near Ely.

Near Beryl the traffic impacts would be similar to those discussed for Alternative 1, but since it would be the first operating base in this case, traffic volumes would be about 20 percent higher. Figure 4.3.2.9-6 shows the projected traffic volumes once the base is fully operational if Beryl is the first operating base.

Near Ely, the increase in traffic along US 6-50-93 between the proposed site and Ely may require widening the road to four lanes. Most of the other roads in the vicinity would also experience increases in traffic but should be able to accommodate the traffic without congestion. Within Ely itself, the anticipated traffic, especially along US 50, would approach the capacity of the existing road making improvements necessary to avoid congestion during peak periods. Table 4.3.2.9-2 summarizes the projected impacts on traffic near the Ely operating base site. Figure 4.3.2.9-7 shows the projected traffic volumes once the base is fully operational.

As in the cases of Delta, Ely would have short term traffic impacts associated with construction of the DDA as well as the operating base.

ALTERNATIVE 4 (4.3.2.9.6)

The impacts would be similar to those identified for Alternative 1. The only difference is that Beryl would be the first operating base in this case and therefore projected traffic levels will be about 20 percent higher (as in Alternative 3) and

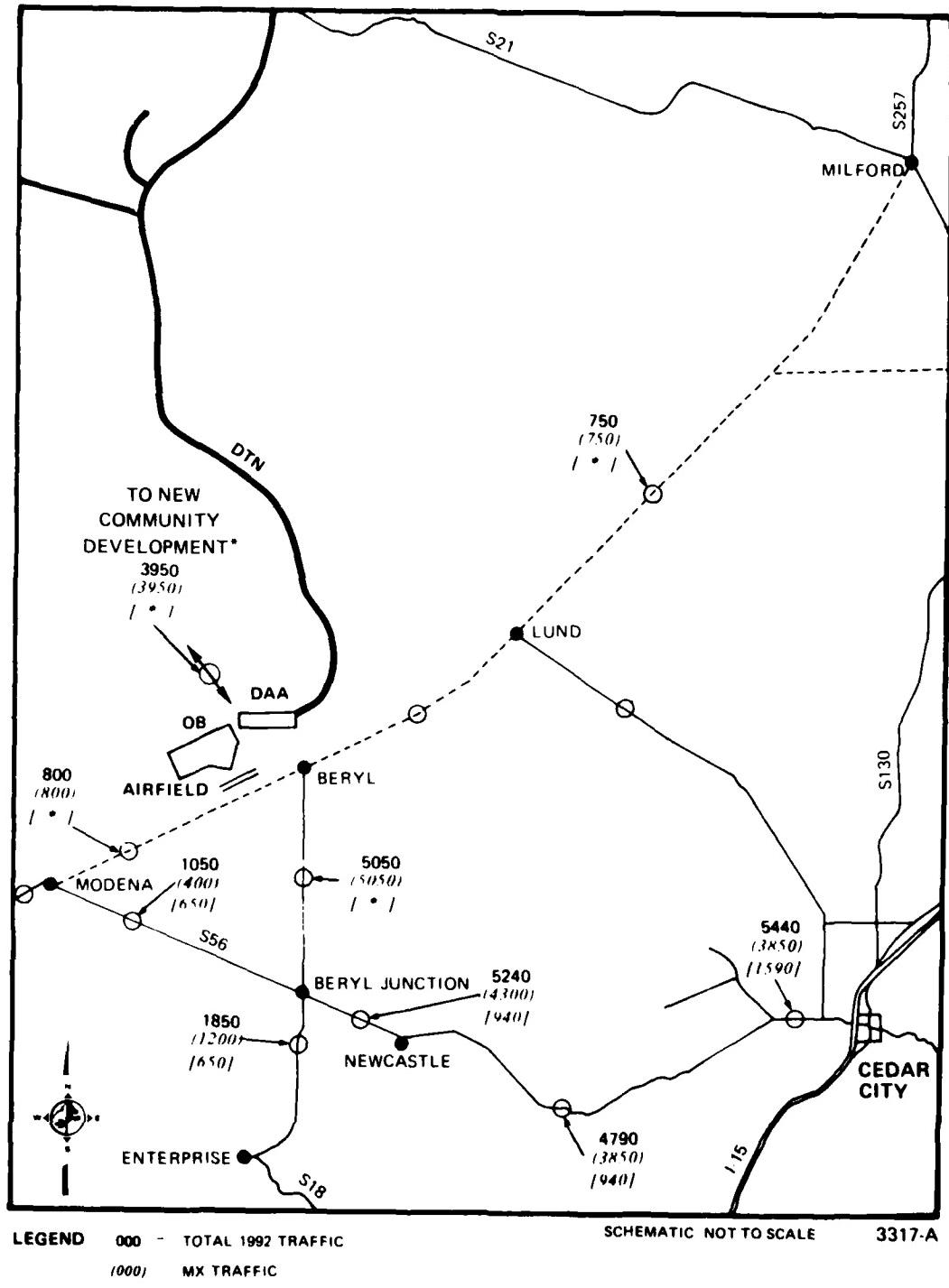


Figure 4.3.2.9-4. Projected traffic volumes in the vicinity of the Beryl operating base for Alternative 1.

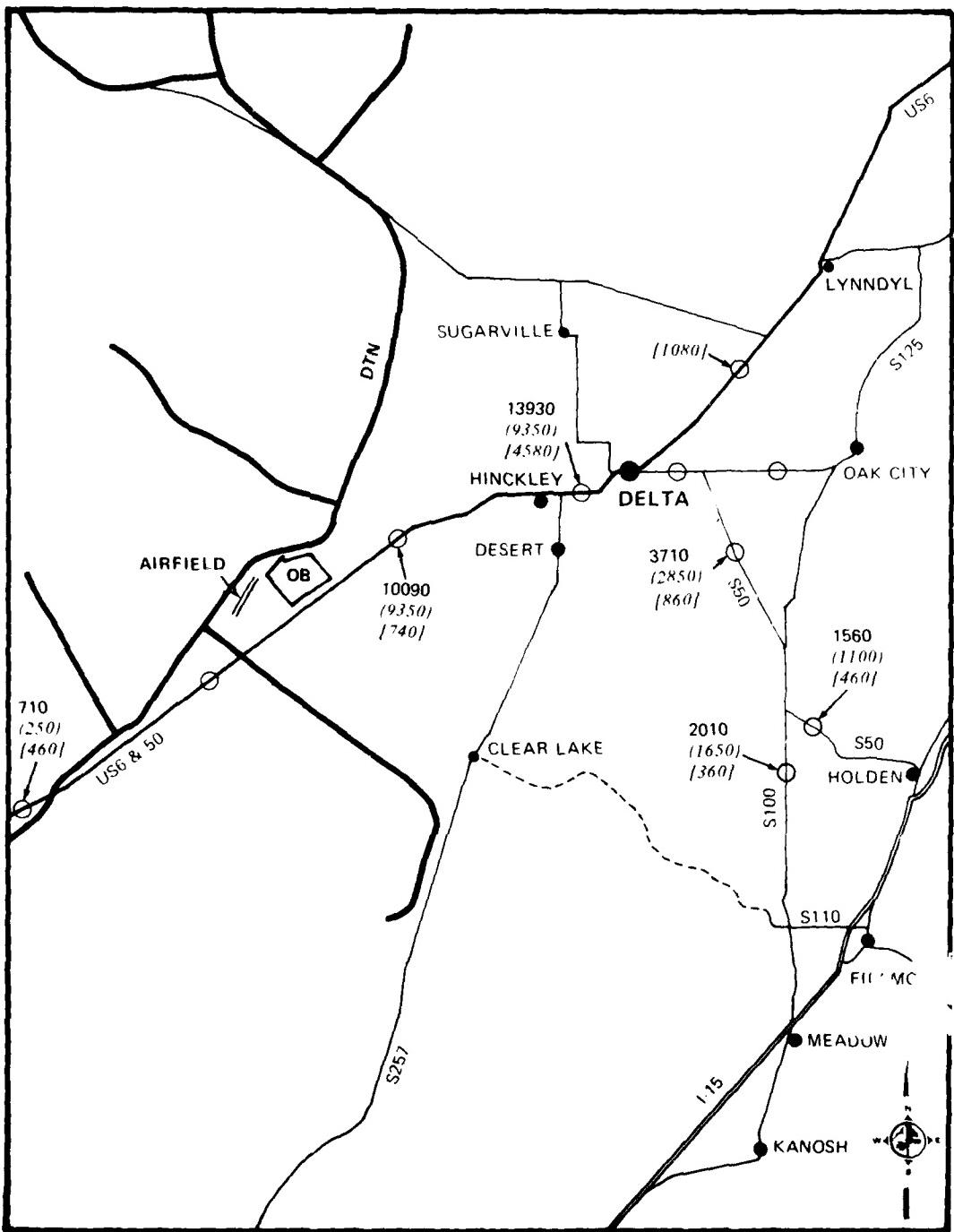


Figure 4.3.2.9-5. Projected traffic volumes in the vicinity of the Delta operating base for Alternative 2.

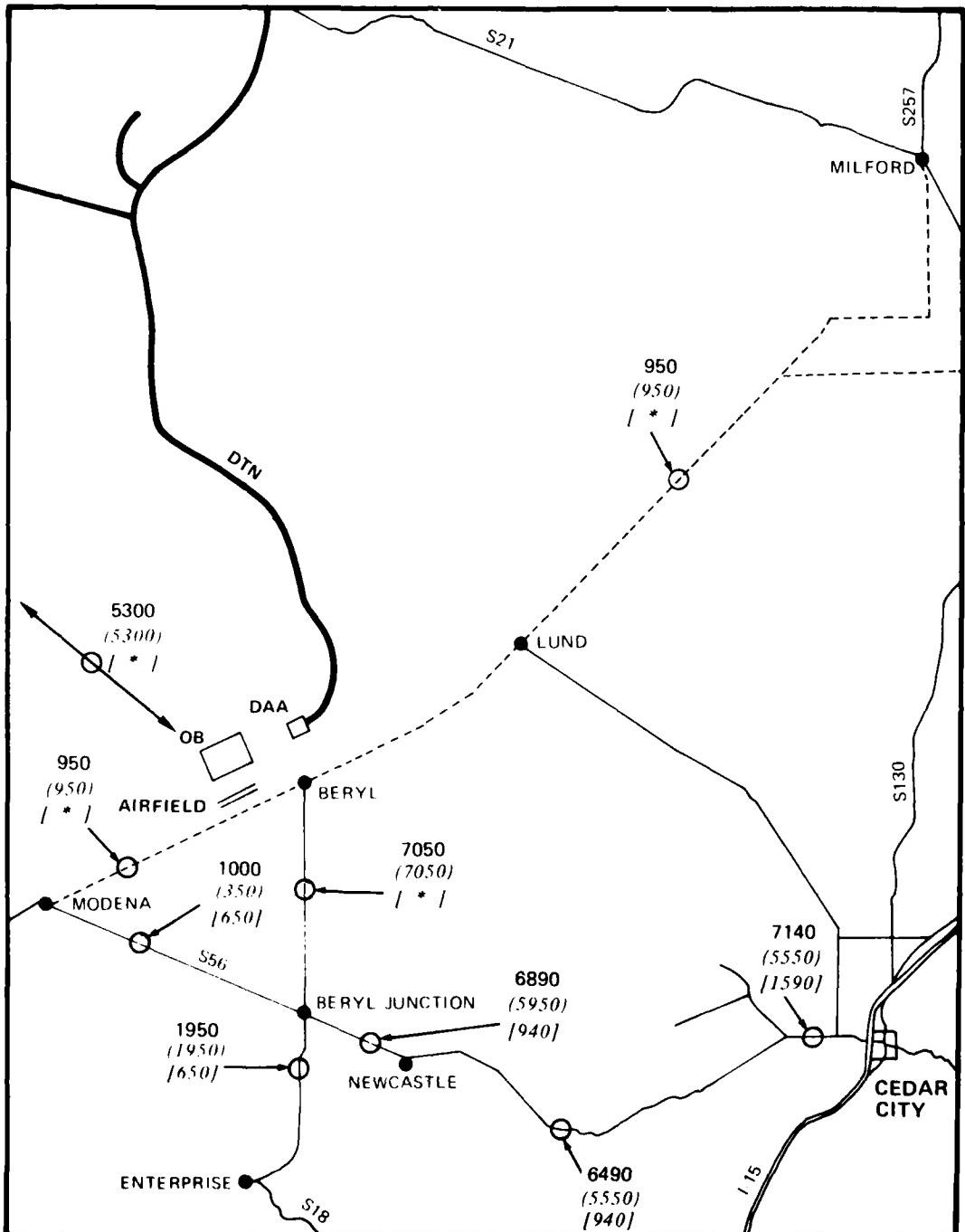


Figure 4.3.2.9-6. Projected traffic volumes in the vicinity of the Beryl operating base for Alternative 3.

Transportation--Alternatives 5, 6, 7

Coyote Spring Valley would be the second operating base and therefore projected traffic levels would be about 20 percent less. Figure 4.3.2.9-8 shows projected traffic volumes if Coyote Spring Valley is the second operating base.

ALTERNATIVE 5 (4.3.2.9.7)

The impacts within the DDA would be comparable to the Proposed Action. Milford, however, would be the first operating base in this alternative, consequently projected traffic levels would be about 20 percent higher than for the Proposed Action. The second operating base would be at Ely and the impacts would be the same as discussed for Alternative 3. Figure 4.3.2.9-9 shows projected traffic volumes if Milford is the first operating base.

ALTERNATIVE 6 (4.3.2.9.8)

The impacts would be the same as for the Proposed Action except that the location of the first and second operating bases would be switched. Projected traffic levels would be about 20 percent higher near Milford (as in Alternative 5) and about 20 percent lower near Coyote Spring Valley (as in Alternative 4).

ALTERNATIVE 7 (4.3.2.9.9)

The same types of impacts that are anticipated for the Proposed Action in Nevada/Utah would occur for this alternative in Texas/New Mexico but not necessarily to the same degree. Within the DDA the existing road network is already extensive and accessibility is good to most areas. Therefore the increase in accessibility and the corresponding indirect impacts would be substantially less than in Nevada/Utah. There are few areas in this region that are not already accessible so that the additions of the project roads would not be as likely to encourage more travel or more development as it would in Nevada/Utah. Figure 4.3.2.9-10 shows existing highways in the area and current traffic levels.

In general, traffic increases within the DDA would not exceed the capacity of the road system, primarily because of the relatively low volume of traffic currently using the roads and because construction activity would be spread out over a wide area. Some inconvenience and delay in the short-term may occur near the construction camps and within some of the small communities in the area. Nevertheless, the amount of inconvenience and delay would be small and of relatively short duration. The traffic associated with construction may increase the amount of maintenance required on the existing roads. Table 4.3.2.9-3 summarizes the projected impacts in the DDA and for the operating bases.

The anticipated project-related traffic in the communities of Dimmitt and Hereford may overload the existing street system during the time when nearby construction camps are operating. Some road improvement may be necessary to accommodate traffic.

The first operating base site near Clovis would be an expansion of an existing facility, Cannon AFB, therefore traffic patterns would remain basically the same although there would be an increase in volume. Some congestion may result along US 60 unless improvements are made, especially at some of the critical intersections. There may be some localized traffic problems within Clovis itself during peak

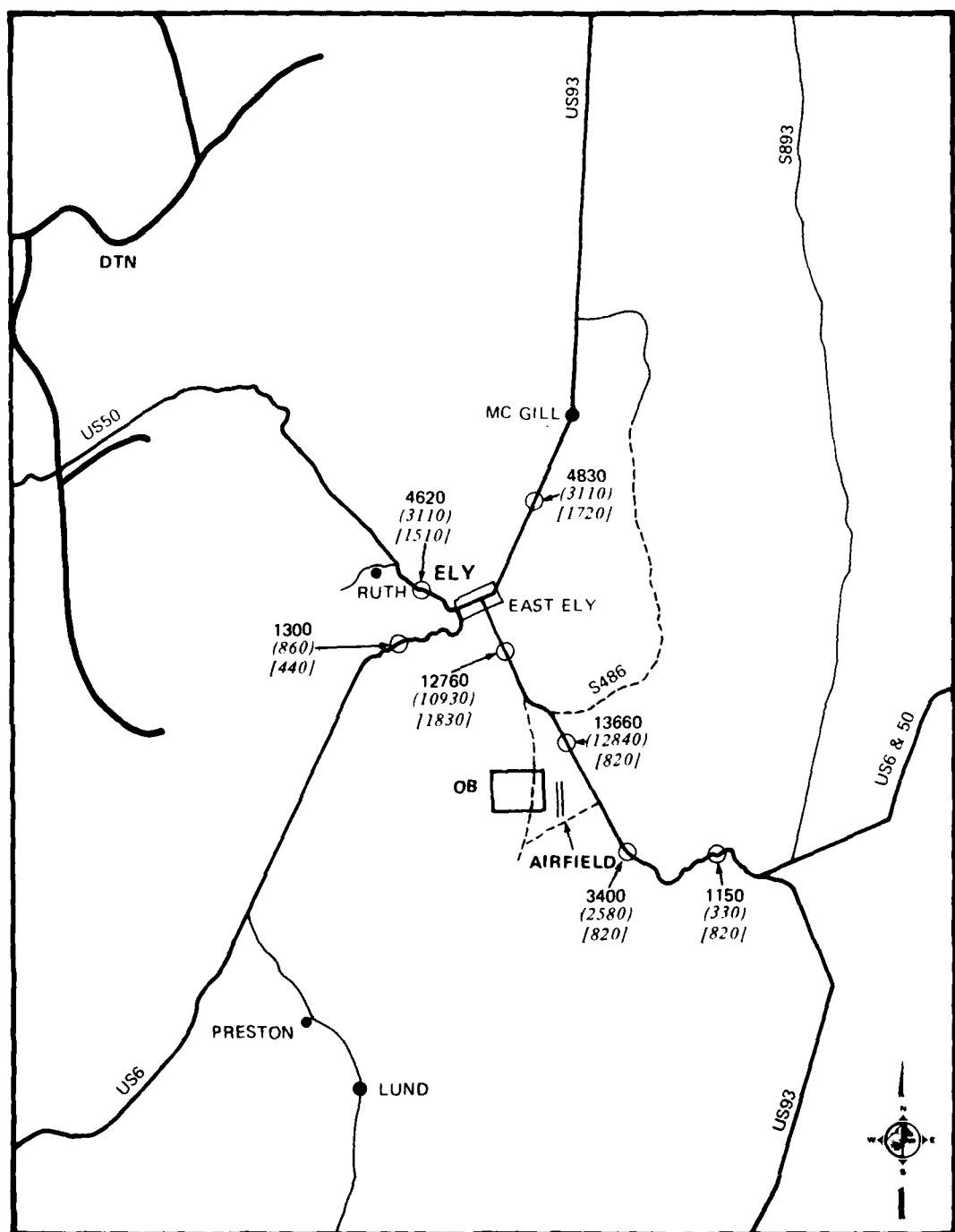


Figure 4.3.2.9-7. Projected traffic volumes in the vicinity of the Ely operating base for Alternatives 3 and 5.

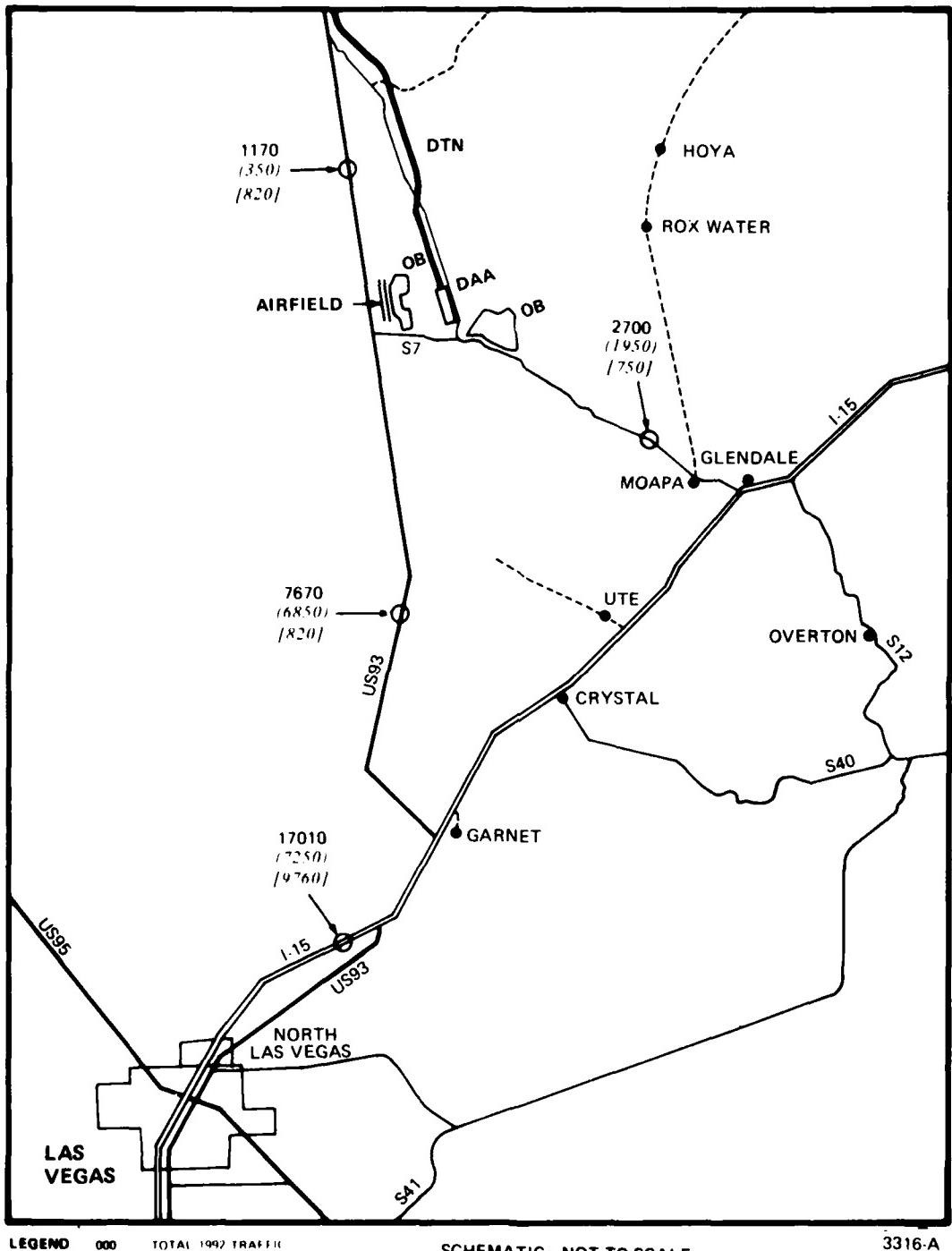
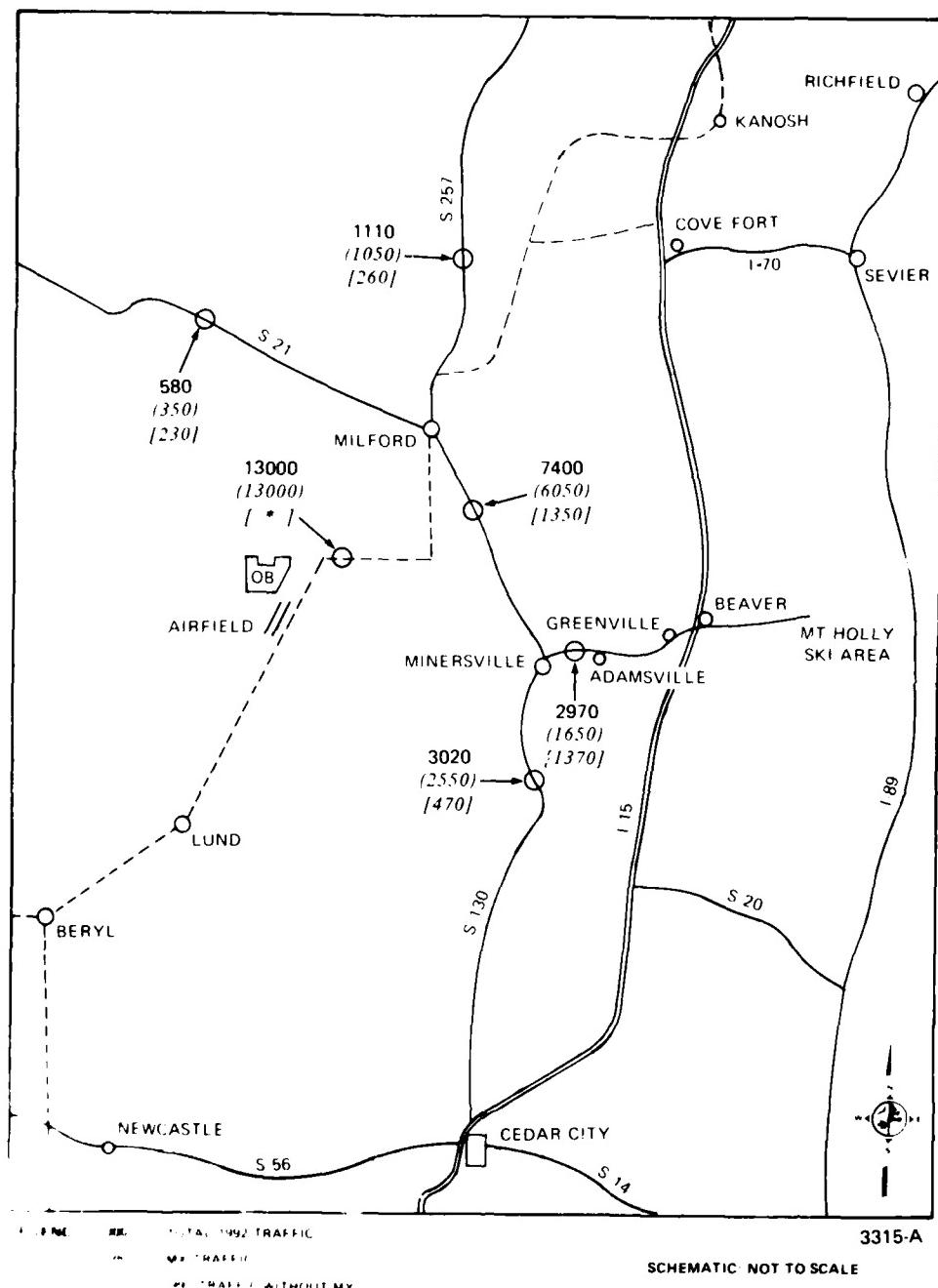


Figure 4.3.2.9-8. Projected traffic volumes in the vicinity of the Coyote Spring operating base for Alternatives 4 and 6.



4-19. Projected traffic volumes in the vicinity of the Milford operating base for Alternative 5 and 6.

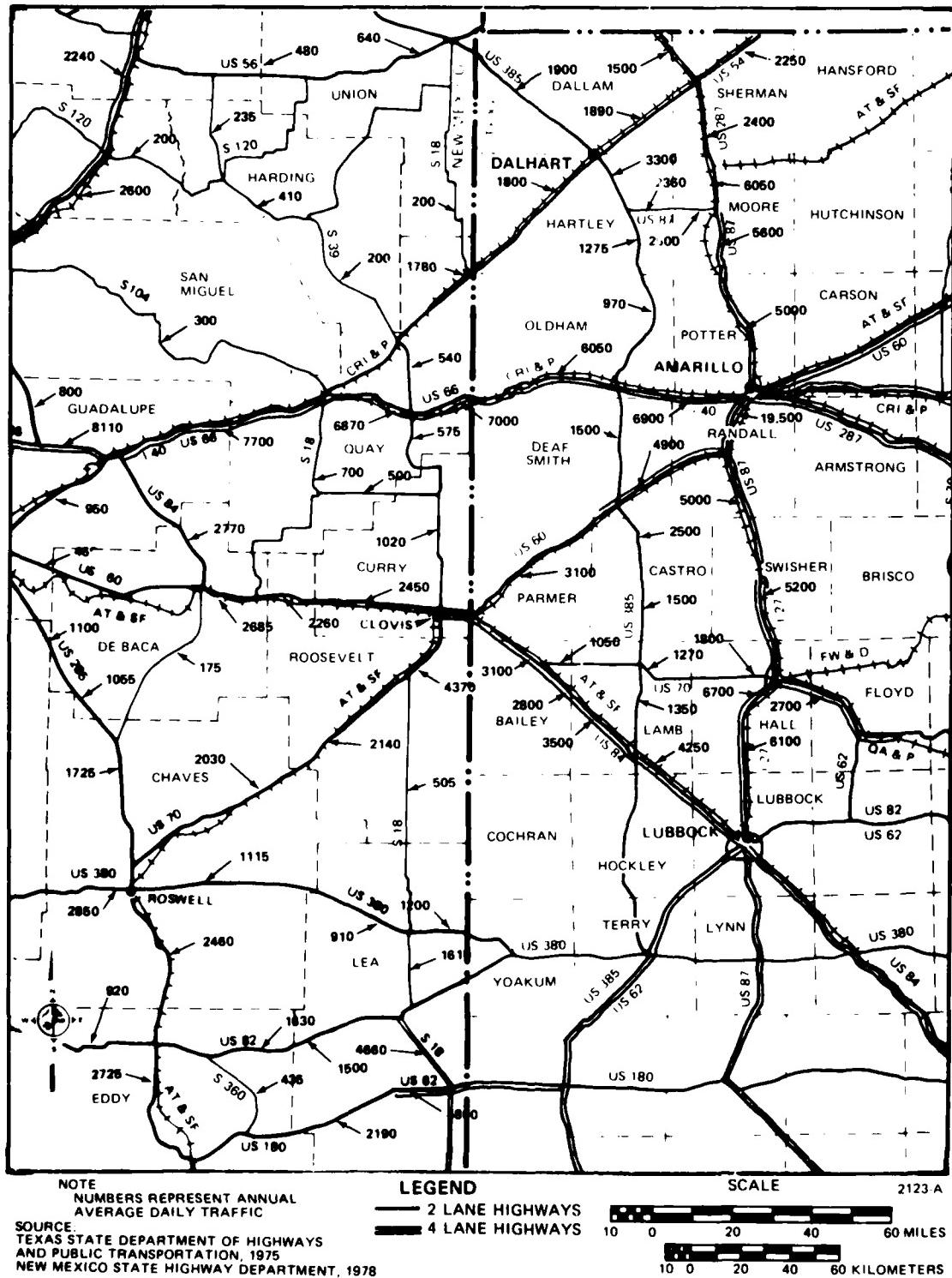


Figure 4.3.2.9-10. Existing highways and recent traffic levels, Texas/New Mexico.

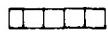
Table 4.3.2.9-3. Potential impacts on traffic which could result due to the location of the DDA and operating bases (OBs) in Texas/New Mexico for Alternative 7.

COUNTY	SHORT-TERM IMPACT ¹	LONG-TERM IMPACT ¹
Counties with M-X Clusters and DTN		
Bailey, TX ²		
Castro, TX ²		
Cochran, TX ²		
Dallam, TX ²		
Deaf Smith, TX ^{2,*}	██████████	
Hartley, TX ²	██████████	
Hockley, TX ²	██████████	
Lamb, TX ²	██████████	
Oldham, TX ²	██████████	
Parmer, TX ²	██████████	
Randall, TX ²	██████████	
Sherman, TX ²	██████████	
Swisher, TX ²	██████████	
Chaves, NM ³	██████████	██████████
Curry, NM ³	██████████	██████████
DeBaca, NM ³	██████████	██████████
Guadalupe, NM ³	██████████	██████████
Harding, NM ²	██████████	██████████
Lea, NM ²	██████████	██████████
Quay, NM ²	██████████	██████████
Roosevelt, NM ^{2,*}	██████████	██████████
Union, NM ²	██████████	██████████

3914-2



No impact. (No or insignificant increases in traffic on existing roads.)



Low impact. (Some increases in traffic expected; however, no road improvements should be required.)



Moderate impact. (Increases in traffic likely to cause occasional delay or inconvenience to motorists. Minor road improvements may be required at critical locations).



High impact. (Increases in traffic expected which could generate requirements for substantial road system improvements)

¹Construction camp in county.

²Operating base in county.

³Conceptual location of Area Support Centers (ASCs).

Transportation--Alternative 8

periods when traffic destined for the base will concentrate on approaches to US 60. In order to relieve traffic along US 60 near the base, it may be desirable to provide an access point directly from State Route 467. Table 4.3.2.9-3 summarizes the projected traffic impacts near the Clovis operating base site. Figure 4.3.2.9-11 shows the projected traffic volumes in the vicinity of the Clovis site once the base is fully operational.

In the vicinity of the second operating base near Dalhart, the increase in traffic could result in some problems in the nearby communities. Dalhart, Dumas and Hartley could be adversely affected by operating base-induced traffic traveling in or through them. All three of the communities could experience localized traffic problems at one or more locations along the main streets depending upon where new housing units or associated commercial establishments are constructed. Table 4.3.2.9-3 summarizes the projected traffic impacts near the Dalhart operating base site. Figure 4.3.2.9-12 shows the projected traffic volumes in the vicinity of the Dalhart site once the base is fully operational.

The mitigation measures identified for the Proposed Action could also be implemented for this alternative.

ALTERNATIVE 8 (4.3.2.9.10)

This alternative involves placing half of the system in Nevada/Utah and half in Texas/New Mexico with one operating base in each. Consequently the impacts in each region would be less extensive, although the concentrations of impact around the project facilities would be similar.

Only half as many roads would be constructed in each region, therefore the increase in accessibility would be proportionately less than discussed for the Proposed Action and Alternative 7. The impacts on traffic near the construction camps would be similar to the full basing alternatives but only about half as many camps would be required in each region. Table 4.3.2.9-4 summarizes the projected impacts on traffic for Alternative 8.

The impacts on traffic near the Coyote Spring Valley operating base site would be similar to those discussed for the Proposed Action and the impacts near the Clovis operating base site would be similar to those discussed for Alternative 7.

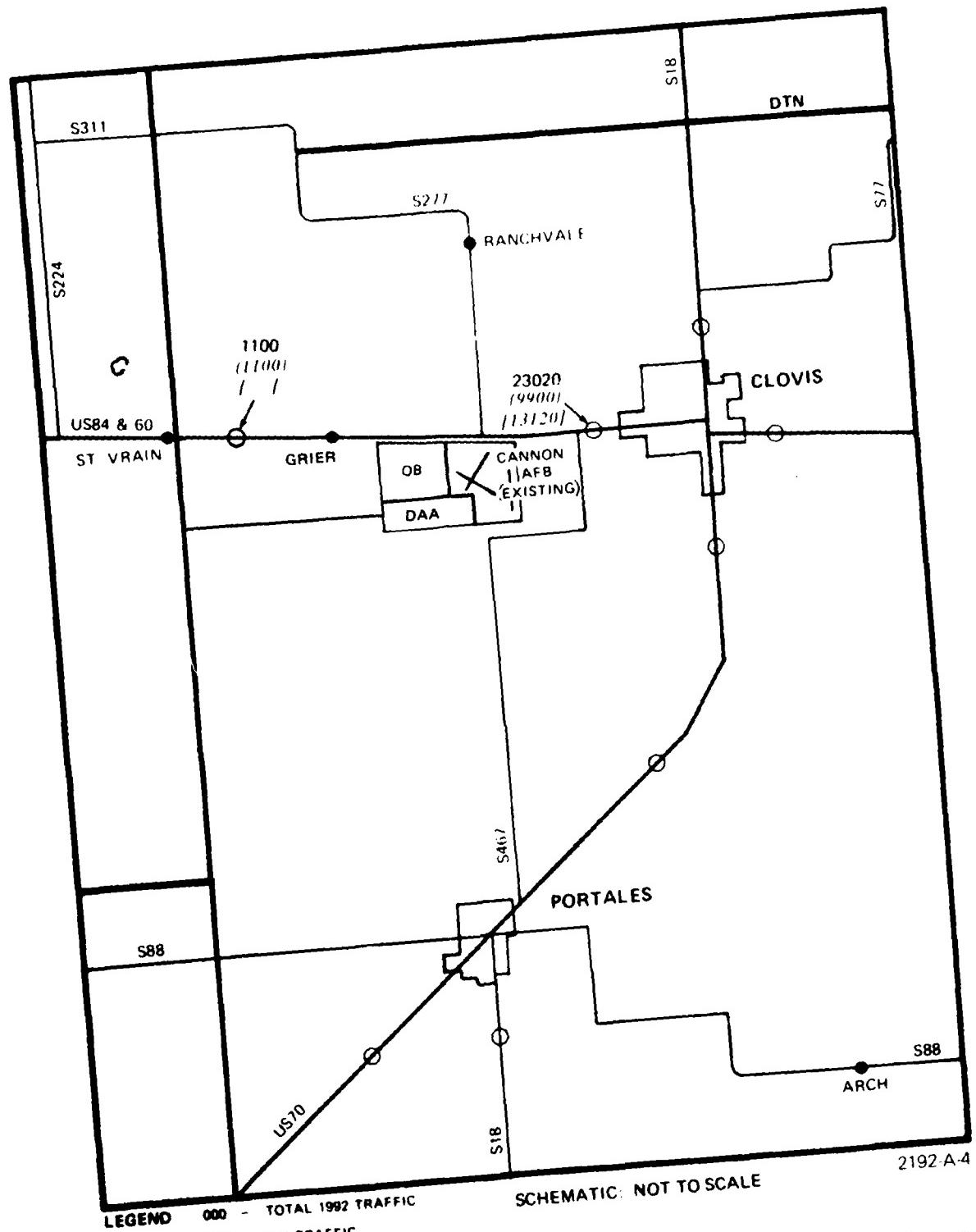


Figure 4.3.2.9-11. Projected traffic volumes in the vicinity of the Clovis operating base for Alternatives 7 and 8 once the base is fully operational.

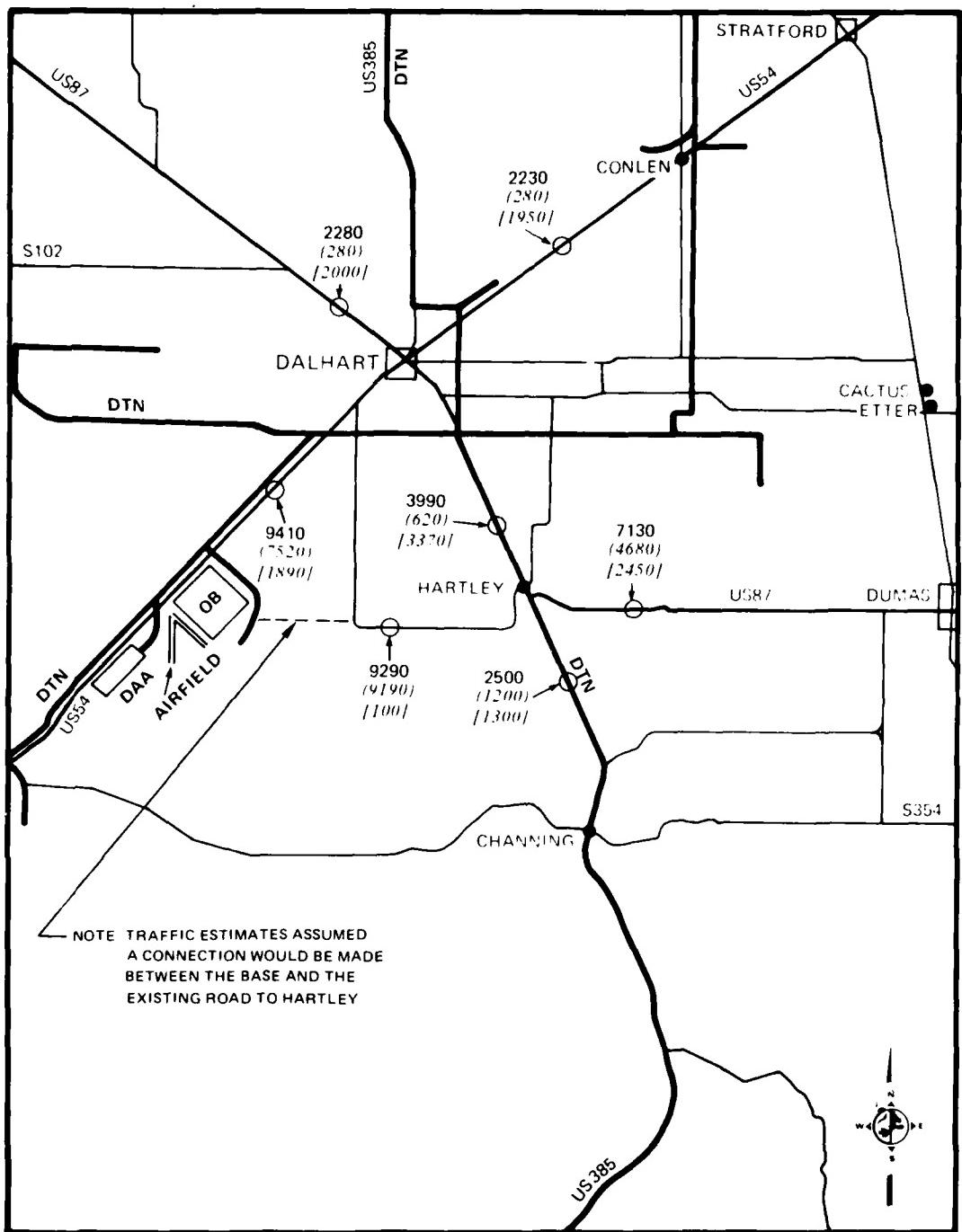


Figure 4.3.2.9-12. Projected traffic volumes in the vicinity of the Dalhart operating base for Alternative 7 once the base is fully operational.

Table 4.3.2.9-4. Potential impacts on traffic due to split base location of DDA and operating bases in Nevada/Utah and Texas/New Mexico for Alternative 8.

HYDROLOGIC SUBUNIT OR COUNTY		SHORT-TERM IMPACT ¹	LONG-TERM IMPACT ²
NO.	NAME		
Subunits or Counties with M-X Clusters and DTN			
4	Snake		
5	Pine ²		
6	White		
7	Fish Springs		
46	Sevier Desert ²		
46A	Sevier Desert-Dry Lake ^{2,3}		
54	Wah Wah ²		
155C	Little Smoky—Southern		
156	Hot Creek		
170	Penoyer		
171	Coal ²		
172	Garden		
173A	Railroad—Southern		
173B	Railroad—Northern		
180	Cave ²		
181	Dry Lake ^{2,3}		
182	Delamar		
183	Lake ²		
184	Spring		
196	Hamlin		
202	Patterson		
207	White River		
Other Affected Subunits or Counties			
210	Coyote Spring		
212	Las Vegas		
216	Garnet		
217	Hidden—North		
218	California Wash		
219	Muddy River Springs		
220	Lower Moapa		
	Bailey, TX		
	Cochran, TX		
	Dallam, TX ²		
	Deaf Smith, TX ²		
	Hartley, TX ^{2,3}		
	Hockley, TX		
	Lamb, TX		
	Oldham, TX		
	Parmer, TX		
	Chaves, NM ²		
	Curry, NM		
	DeBaca, NM		
	Guadalupe, NM		
	Harding, NM ²		
	Lea, NM		
	Quay, NM		
	Roosevelt, NM ²		
	Union, NM		

3915-2



No impact. (No significant increases in traffic on existing roads.)



Low impact. (Some increase in traffic is expected; however, no road improvements should be required.)



Moderate impact. (Increases in traffic likely to cause occasional delay or inconvenience to motorists. Minor road improvements may be required at critical locations.)



High impact. (Major increases in traffic expected which could generate requirements for substantial road system improvements.)

¹Construction camp in county.

²Conceptual location of Area Support Centers (ASCs).

END
DATE
FILMED
10-81
DTIC